METTLER TOLEDO

bPro

Scale / Printer

Technical Manual

72186164

bPro – T2

bPro – C2

bPro – U2

bPro – U3/U4

bPro – R2

bPro – H2

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INTRODUCTION

This publication is provided solely as a guide for individuals who have received Technical Training in servicing the METTLER TOLEDO product.
Information regarding METTLER TOLEDO Technical Training may be obtained by writing to:

METTLER TOLEDO
111 West Taihu Road, Xinbei District
Changzhou, Jiangsu, China
(+86) 519 8664-2040

FCC Notice

This device complies with Part 15 of the FCC Rules and the Radio Interference Requirements of the Canadian Department of Communications. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

METTLER TOLEDO RESERVES THE RIGHT TO MAKE REFINEMENTS OR CHANGES WITHOUT NOTICE.

PRECAUTIONS

READ this manual BEFORE operating or servicing this equipment.

FOLLOW these instructions carefully.

WARNING
ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

SAVE this manual for future reference.

WARNING
FOR CONTINUED PROTECTION AGAINST SHOCK HAZARD CONNECT TO PROPERLY GROUNDED OUTLET ONLY. DO NOT REMOVE THE GROUND PRONG.

DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CAUTION
BEFORE CONNECTING/DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS BEFORE ANY CONNECTIONS OR DISCONNECTIONS ARE MADE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT OR BODILY HARM.

CALL METTLER TOLEDO for parts, information, and service.

CONTENTS

1 Specifications 1
- General Description 1
- Features 2
- Customer/Vendor Display 3
- Keyboard 4
- Dimensions 7
- Weighing Capacity 10
- Tare 11
- Memory Specifications 11
- Agency Approvals 11
- Electrical 11
- Label Printer 12
- Operating & Storage Temperature 14
- Database Records 14
- Major Compont Map 16
- Index of Specifications 17

2 Installation 18
- Unpack the Shipping Carton 18
- Setup Checklist 19
- Leveling 20
- Install Tower 20
- Install Platter 21
- Power On 21
- Label Installation 22
- Calibration 23

3 Setup 26
- Menu Tree for Scale Setup 26
  - Navigating within the Setup Menu 26
  - Menu Tree 26
- Enter setup 29
- Exiting setup 29
- Overview of mode functions 30
- SCALE CONFIGURATION 31
- DATA ENTRY 32
- Keyboard configuration 48
  - Standard configuration 48
  - Function keys 48
  - Special keys 48

List CONFIG 49
Operator configuration 49
Standard configuration 49
New configuration 49
List Config 49
Special function 50
Label definition 53
Password setting 53
Service function 54
Function test 55
Memory test 55
Interface test 55
High resolution display 55
Primary configure 56
Reset ticket number 56
Clear BRAM 56
Fonts tabel 56
Reset scale as default 57
Clear all PLU data 57
Clear Group 57
Clear operator 57
Network configure 58
Ticket print test 59
Label Printer Test 59
Configure RS232 60
Reports 61
PC software 64
Flashing Software 65
4 Troubleshooting 66
Troubleshooting Guide 66
POWER SUPPLY 68
Main Logic PCB 69
Load Cell 71
Warning Message 71
Error Message 73
Interconnecting Diagram 75
5 Parts Replacement 76
Replace main PCB 76
Counter type 76
Hanging type: 77
Replace switch power 78
Counter type: 78

Replace display 80
Counter type 80
Hanging type: 81
Replace load cell 82
Counter type 82
Hanging type: 84
Replace keyboard 86
Counter type 86
Hanging type: 87
Replace printer 88
Counter type 88
Hanging type: 90
Replace printer head 91
Install Wireless card 92
Install the memory extension board 95
6 Maintenance 97
External Cleaning 97
Cleaning Printhead 97
Rezeroing 98
7 GEO Settings 99
8 Replacement Parts 100

1 Specifications

General Description

The METTLER TOLEDO bPro is a digital computing scale with an integrated thermal label printer. It is an Ethernet scale with a wireless option, which has a database containing the PLU's, Extra Text and etc. A PC program is available to download or upload the database from the PC. The bPro has 4 MB RAM memory and 4MB Flash ROM. The PLU memory can handle up to 25000 items.

The standard bPro weighing capacity is 15 Kg (30 Lbs). Weighting resolution can be set up for a single range with 0.005 Kg (0.01 Lbs) or a dual interval option for 0.002 Kg (0.005 Lbs) from 0 to 6 Kg (15 Lbs). In the dual interval, the single range resolution applies between 6 -15 Kg (15-30 Lbs). Weighting options for 30 Kg (60 Lbs) are also available. This scale utilizes a dot matrix display that will display weight, tare, unit price and total price, as well as item description.

The bPro, like all METTLER TOLEDO products is designed for maximum durability and reliability in even the most demanding application environments. The bPro is manufactured in one of METTLER TOLEDO's ISO 9001 and ISO 14001 certified facilities so you are assured to receive a high quality product.

Features

- 6kg, 15kg, 30kg (3000e or 3000e dual range)
- Full Dot Matrix display with 240x240 resolution on both operator side and customer's side.
- Four seven-segment numeric display for: 5 digits weight, 5 digits tare, 7 digits unit price and 7 digits total price. One 16-character alphanumeric display for programming and item description.
- Indicators for zero, net and prepack mode.
- Compliance with H44 3000e, R76 OIML 3000e and Canadian W&M.
- Light Touch Tactile feel membrane keyboard and an audible beeper.
- A 70 position preset keyboard for fast PLU retrieval. (can save 140 PLU in two levels) Includes QWERTY keypad in programming mode for easy PLU editing.
- Real time clock and RAM are backed up by a rechargable lithium battery with at least 1 month memory retention without external power.
- Push button zero (auto zero at power up) and automatic zero tracking.
- Price, Shelf Life, Quantity, and Extra Text, Label Format, and SPEC Message override capability.
- VOID key for clearing previous transaction from accumulator.
- Computer interface port (RS232), or Ethernet for use with BSOFT software. USB port for PLU updates (Future)
- Integral thermal label printer with 8 dots/mm print head. Adjustable 40 to 60mm width. Supports both UPC and EAN symbology. The printer can use die cut labels, continuous strip labels and continuous thermal paper.

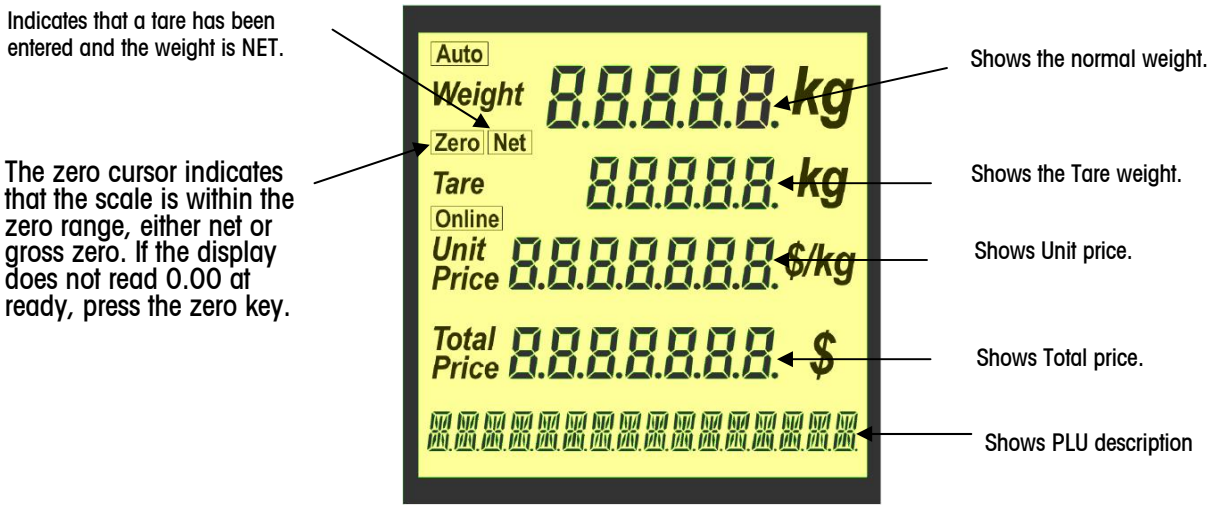
Customer/Vendor Display

There are two displays on the scale, one is on the vendor side and the other is on the customer side. They are all mounted on the tower except bPro-C2 model.

These two LCD displays incorporate a yellow color LED backlight. Both the customer and vendor displays show 5 digits of weight, 5 digits of tare, 7 digits of unit price and 7 digits of total price values along with cursors for Zero, Net and Prepack mode. Both the customer and vendor displays can also show 16 alphanumeric characters for commodity description, marquee and prompt messages during programming.

The Weight display characters are 13.2mm high by 8.16mm wide. The Tare Weight, Unit price and Total Price display characters are 11mm high by 6.6mm wide. The alphanumeric characters are 8.36mm high by 4.18mm. The display legends definitions are shown in the figure below.

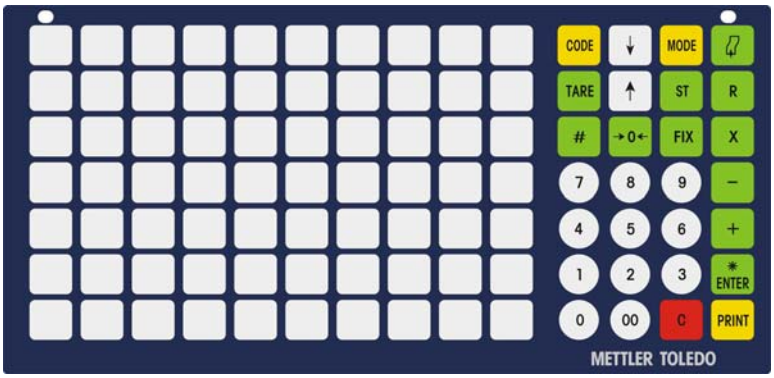
Another 240x240 full dot matrix display, this can enable display Chinese, Thai language, Arabic etc, special offers to increase in-store scales.



Keyboard

The keyboard consists of membrane layer, rubber button layer, programming layer, operating layer and touch pad layer. The multi layer makes it easy to press the key which we call it light touch tech. The layers are replacable and you can take them down and wash them with water (except the membrane layer). This will make maintenance much easier.

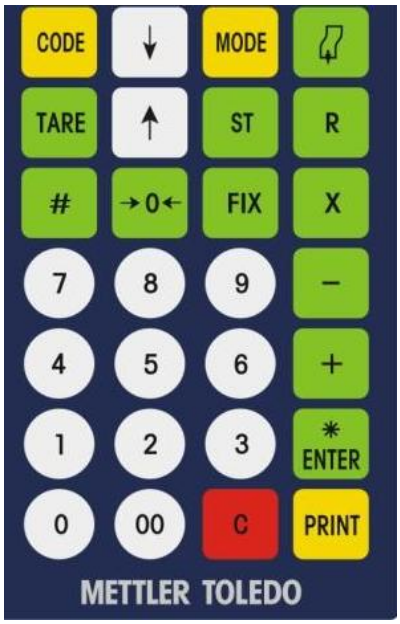
The 28 keys on the right keypad are used for entering basic scale functions.



Operating Layer (T2 model)

Programming Layer (T2 model)

The keyboard can be adjusted to 4 levels according to customers' wish. Only T2 and C2 models have this function.



Meaning of the function keys

#	Free entry of a price per piece
↓	Continue
V1	(PRINT,V2,V3,V4） Vendor, clerk
↑	Go back
00	Numeric keypad
[TARE]	Tare
C	Clear;
→0←	Zero
✳	Customer total , Confirm
[CODE]	Code and switching
+	Manual entry of a price per piece to add
MODE	Mode and switching
−	Manual entry of a price per piece to subtract
	Paper feed
X	Multiplication
[FIX]	Fixed unit price / fixed tare
R	Change back
ST	Void

Special functions

- Pressing CONFIG than PRINT will list the scale information on a label such as software version, IP address, MAC Address, scale type, scale ID, as well as the Product ID of the scale.
- Power On while pressing Print to access the Serial Flash mode for Wait for Host
- Power On while pressing clear (C) to access the Network Flash mode
- Power On while pressing CODE to access display mode selection

Some type has the [TM] key, used to Tare manually.

Special functions keys

1 to 70	preset keys
V2,V3,V4	vender keys V2-V4
[-%]	increase/decrease key (Discount key)

Note: The left 70 keys are preset keys which can store 140 PLUs for fast PLU retrieval. Different type has different quantity preset keys.

Remark :

*V2, V3 and V4 key can be configured as preset keys or vender keys, but one function is available at one time.
*[-%] key can be configured as preset key or increase/decrease key, but only one function is available at one time.

The following function keys can be used as word processing keys while entering PLU description, store address, Extra Text and etc.

Meaning of the 'programming" keyboard keys

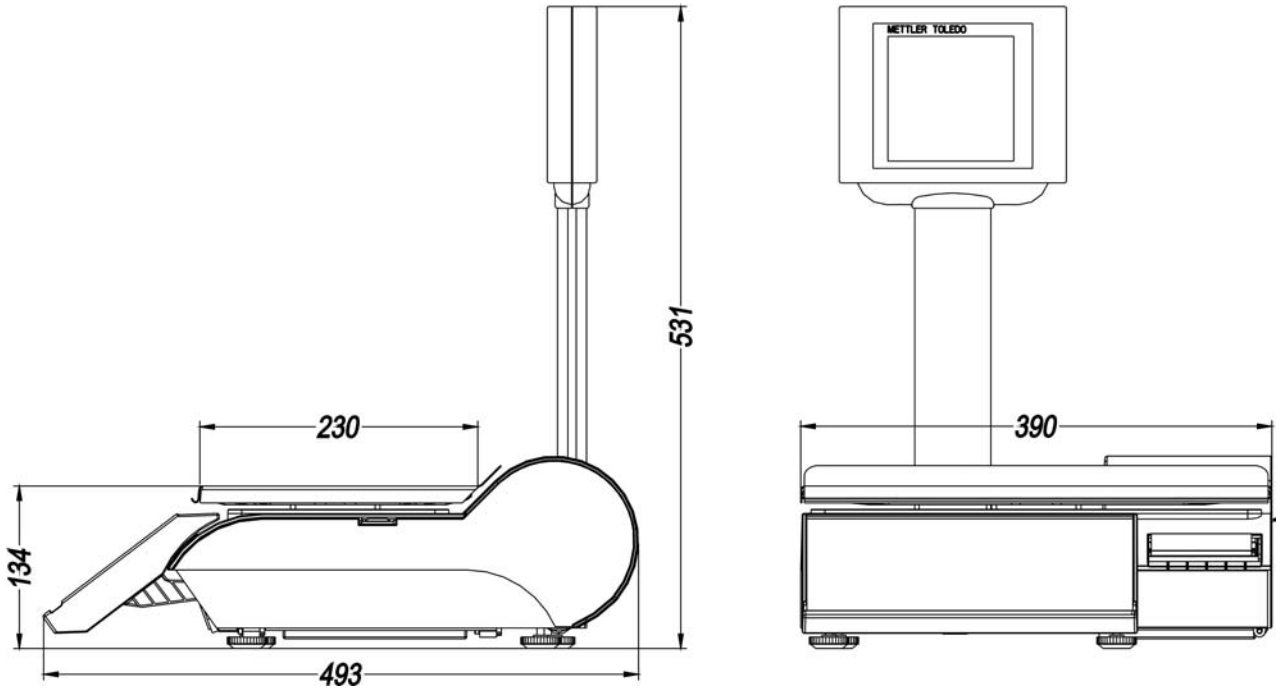
HOME	Go to beginning of text
END	Go to end of text
←	move the cursor one position left in the text edit mode
→	move the cursor one position right in the text edit mode
↓	Go to next sub-menu
↑	Return to previous sub-menu
SHIFT	Get upper case characters in text edit mode or select a key's 2nd function
ALT	Alternate: special characters in text edit mode
BS	Backspace (delete the character left of the cursor)
[DELETE]	Delete (delete the character on the cursor)
[iNSERT]	Insert (insert a character on the cursor)
[→ABC←]	Center the text in text edit mode
[ENTER]	Carriage return (next line)
✳	Selection of a menu

The 70 keys on the left keypad can be programmed as direct access keys (Presets). There are two levels to the preset keys for a total of 140 PLU Presets. The Preset keys should be configured first before being used. Please refer to section 3 'PLU Preset' for programming the Preset keys.

To recall a PLU simply select the proper level and press the desired preset.

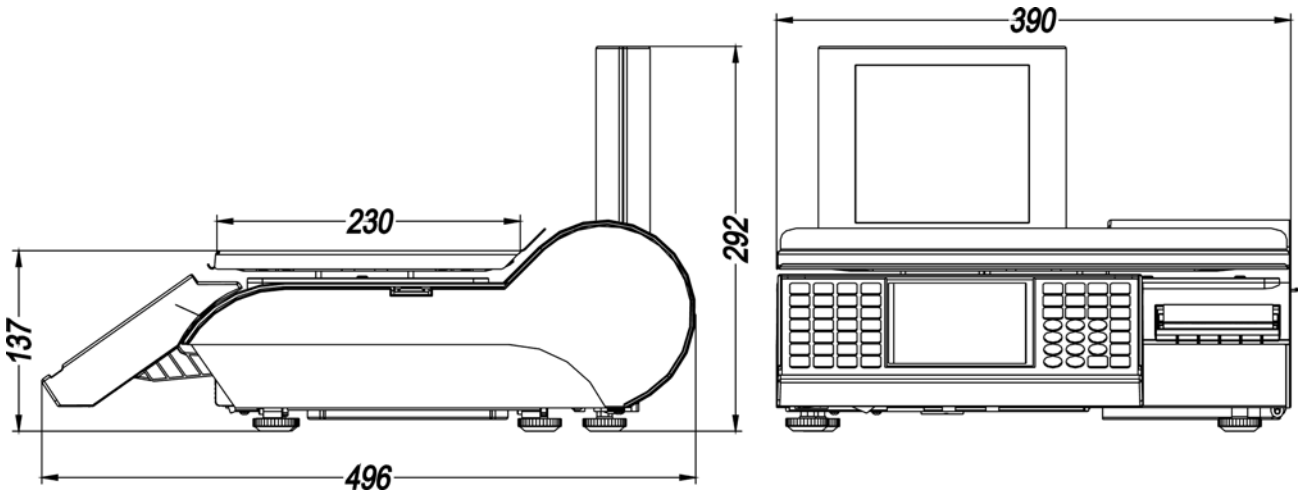
Dimensions

bPro-T2

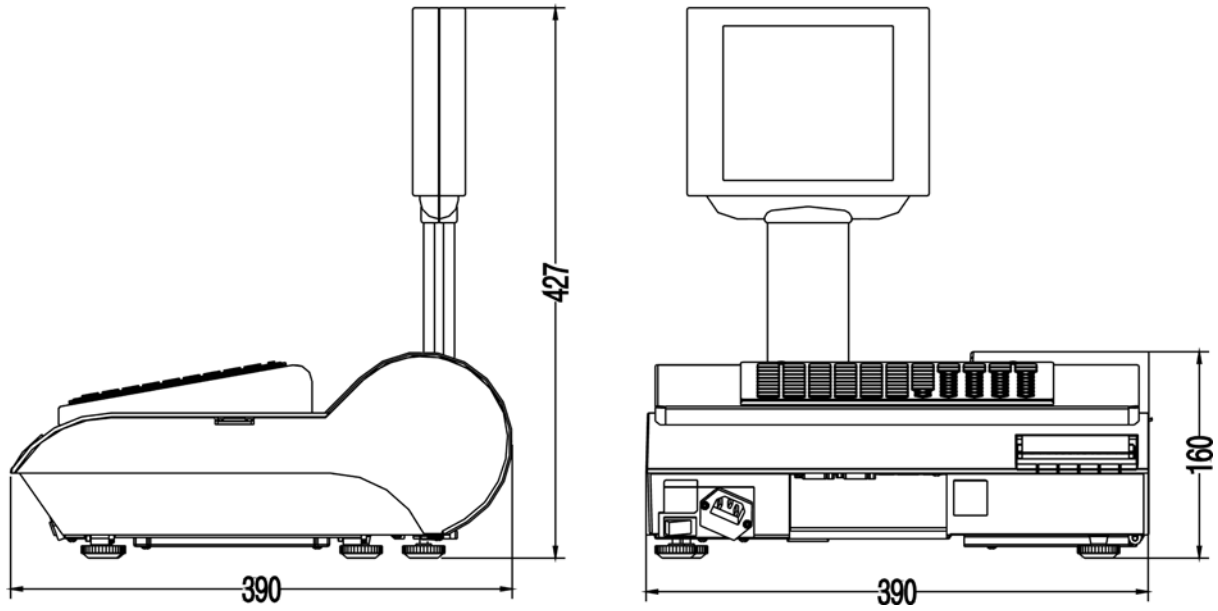


bPro-U2

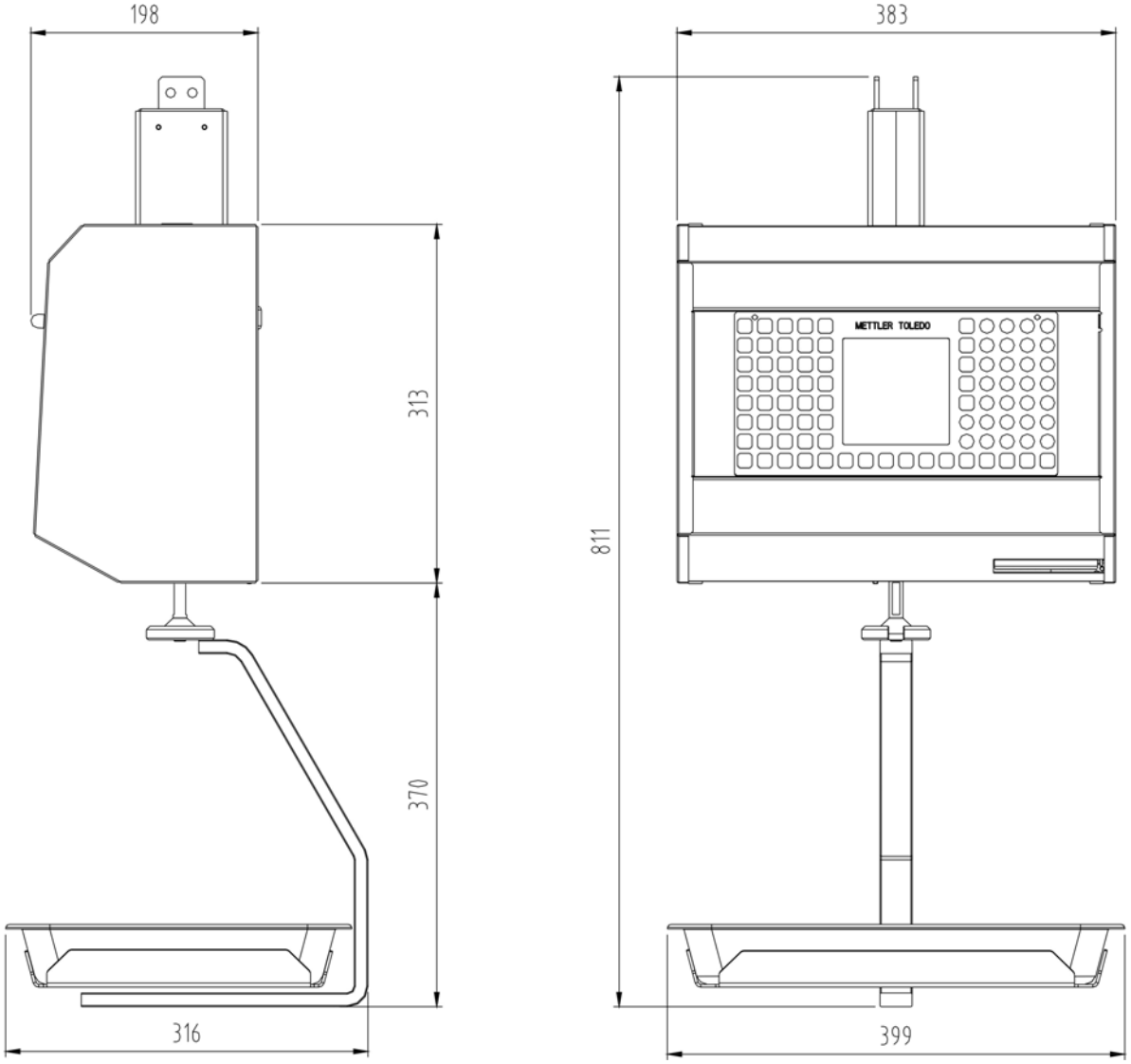
bPro-C2



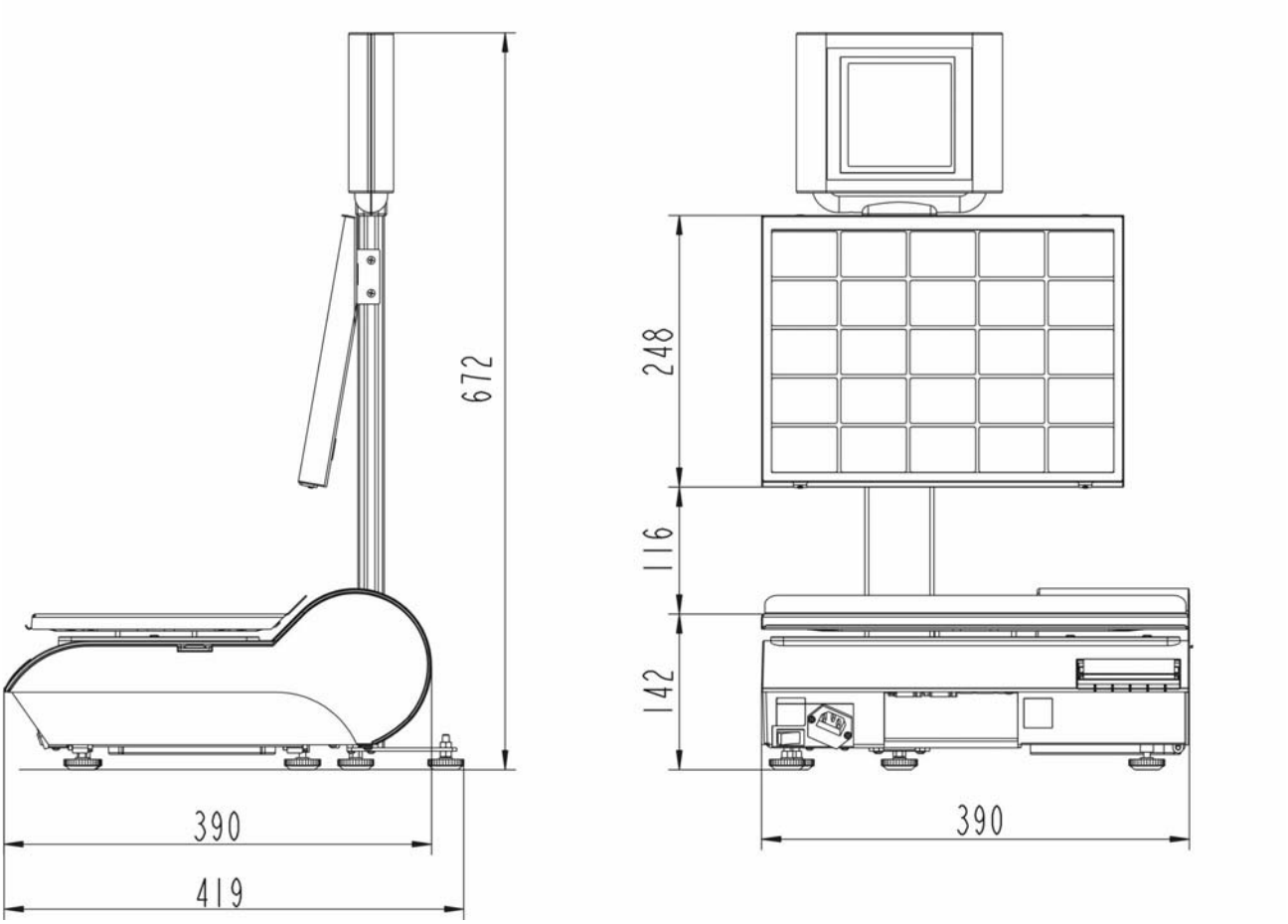
bPro-R2



bPro-H2



bPro-U3



Weighing Capacity

The bPro can be programmed for 3/6x0.001/0.002, 6/15x0.002/0.005kg, 15/30x0.005/0.010kg capacities. The built-in scale is designed to withstand static overloads up to five times the rated capacity without sustaining permanent damage. A weight greater than five increments over capacity causes the weight display to "-----" and printing is inhibited. If the scale is under zero by more than five increments, the weight field will display dashes "|_____|". When zero can not be captured, the weight field will display "-----".

Tare

Tare is limited to a maximum of 2/3 full capacity.

Memory Specifications

The Main Logic PCB contains a rechargable lithium battery that will retain backup PLU's and the time/date in the SRAM memory for up to one month. Other data, including calibration data are retained in the EEPROM which requires no battery for memory retention.

Agency Approvals

The model bPro is designed to meet the requirements of the following agencies:

OIML	OIML R76 standard
EC	Euro CE standard
NIST	NTEP requirements for Class III weight device. NTEP/California Electronic Cash Registers General Code Requirements
FCC	Requirements for FCC Conducted Emissions and Radiated Emissions for a Class A device.

Electrical

The bPro requires a dedicated grounded 100/240 VAC, 50/60 HZ supply, and draws 0.3 amps (scale/printer versions). The AC line (including ground) must not be shared with noise and surge generating equipment such as, electric motors, compressors, thermostats, fluorescent lights, etc. A line conditioning device is

recommended to provide protection from surges and spikes. The Power supply uses an electronic overload protection circuit designed to protect the internal electrical components.

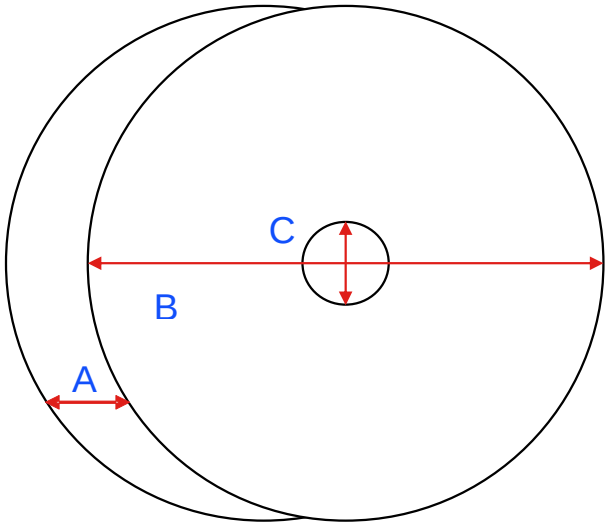
Label Printer

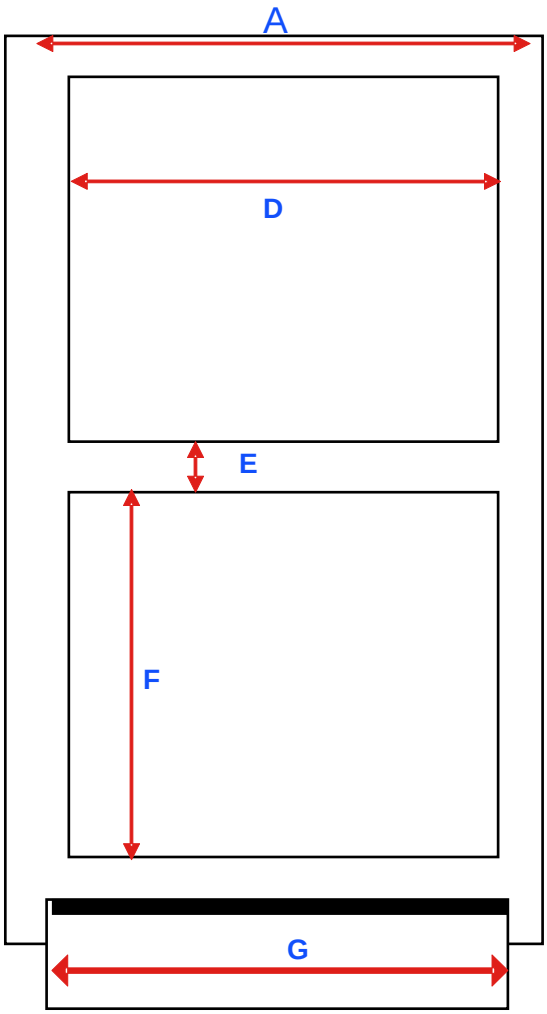
Labels can be printed with the built-in thermal label printer. The printer uses a 60mm wide, high resolution, 8 dots/mm, thermal print head. The printer driver PCB incorporates a heat detection circuit to ensure the best possible print quality while eliminating any possibility of overheating the head. Overheating is the major cause of premature print head failure. The print speed and density can be adjusted via SERVICE MODE to compensate for varying types of labels.

The printer can use standard label sizes ranging from 25mm to 102mm long, and continuous strip stock. Labels can be loaded in a stripped or un-stripped mode. In stripped mode, the labels automatically peel from the backing liner. In the un-stripped mode, the label and liner will be delivered. A tear/bar allows continuous stock to be torn to exact length needed. Print specifications for the thermal printer are as follows:

PRINTHEAD TYPE:	Thick Film Thermal Printhead
DOT DENSITY:	8 Dots/mm
PRINT SPEED:	125 mm/sec maximum

Printer 2" paper dimensions





Dimensions Labels

	Min.	Max.
A	30 mm	82 mm
B		130 mm
C		40 mm
D	30 mm	82 mm
E	2 mm +/- 0.2 mm	
F	25 mm	102 mm
G	56 mm eff. print width, The print head is centred over the paper.	

Print resolution: 8 Pixel/mm

Dimensions Receipt

A	52 mm
B	130 mm
C	11 mm

Paper length max: 150 m

Operating & Storage Temperature

Operating Range: -10°C to 40°C (14°F to 104°F), humidity from 5% to 85% non-condensing.

Storage Range: 0°C to 70°C (32°F to 158°F), humidity from 5% to 85% non-condensing.

Database Records

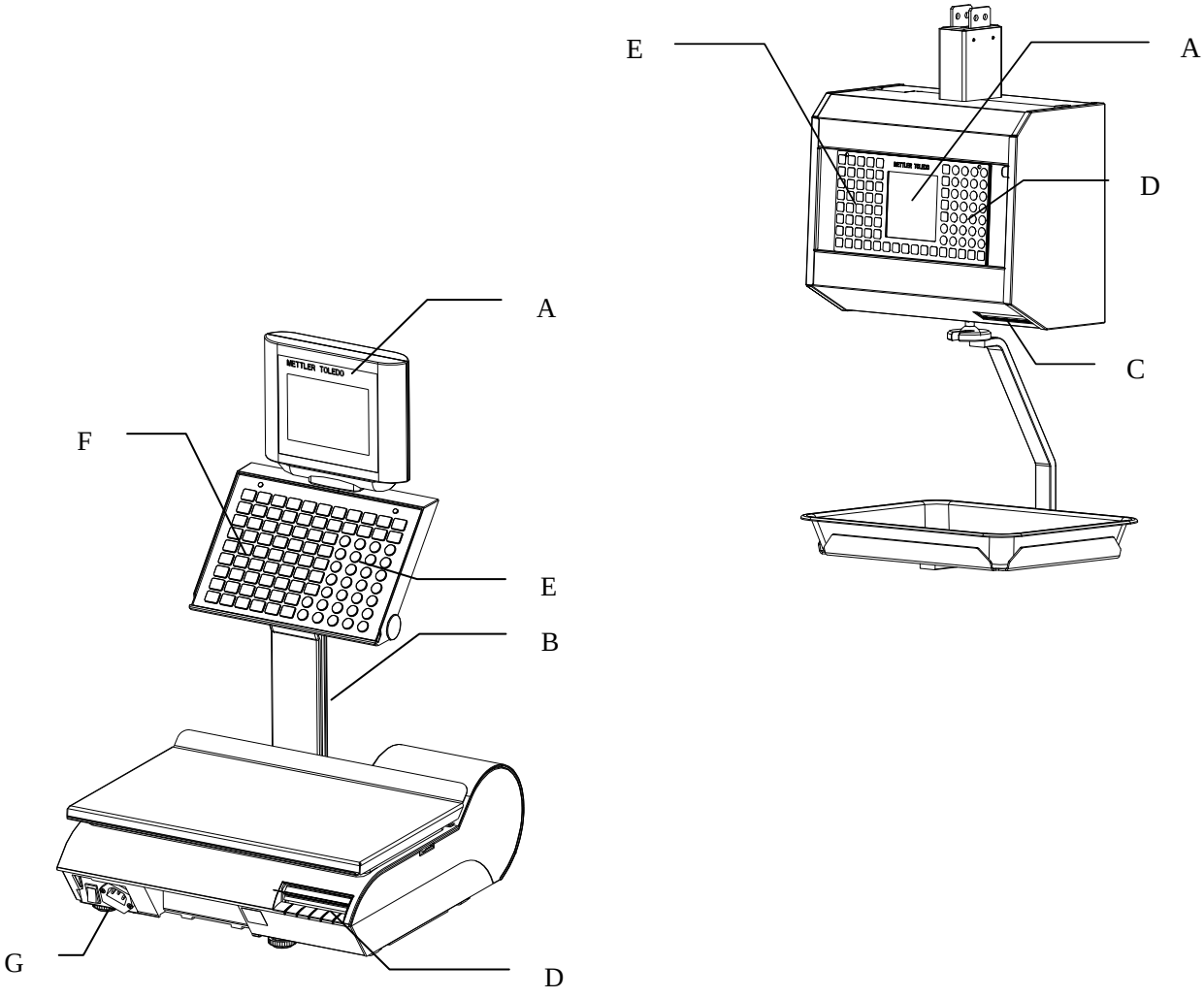
The PLU database file consists of:

Field Name	Description	Range
PLU Number	Price Look Up number used for database indexing and to call up a record	0 – 999999
Item Number	The product number is a number that is encoded in the EAN Bar Code symbol. This number can be inputted up to 13 digits.	0 – 9 each character
Description 1	Text used to describe the product for line 1	28 char/line
Description 2	Text used to describe the product for line 2	Up to 150 characters,10 lines
Group No	A two digit number between 0 and 99 used for reports; 0 is no group	0 – 99
Unit Price	Product unit price: Price per lb by weight or Price per piece	0.00 to 99999.99
2nd Unit Price	Second unit price. Depend on the price rule	0.00 to 99999.99
Price Rule No	Decide the Unit Price. 0,1: 1st Unit Price 2: 2nd Unit Price 3 -10: link to discount number	0 -10
Label Format	This will contain the label format number. 0 = scale default. 101 through 109 are fixed formats. Others are custom label formats.	0 – 199
2nd Label Format	Number for second label.	0 – 199
Best Before Days	This is the number of days from the current	0 – 999

	date that the item can be used	
Sell By Days	This is the number of days from the current date that the item can be sold	0 – 999
PLU Type	By-Weight; By Count;	0/1
Tare/By Count No	Tare number for by weight PLU; Quantity for by count PLU	0 – 99/0-9999
Fix Weight	The Net Weight of By Count PLU	0.00 – 99.999
Extra Text Number	This is the extra text number to be used with this PLU. '0' means no ET will be added.	0 – 999999
Increase/Decrease	Allow PLU to have a discount	0/1
Allow Price Change	This allows price changes during normal operation.	YES/NO
NUTRITION No.	Number of Nutrition	0-999999
Pack date print	Print format for packing date	0-4
Best before print	Print format for Best Before date	0-5
Sell by print	Print format for Sell by date	0-5
Graphic No.	Number of Graphic link to PLU	0-200

Major Component Map

External Components



Ref	Description
A	Display
B	Tower
C	Platter supporter
D	Printer
E	Numeric Keypad
F	Preset Keypad
G	Power switch

Index of Specifications

bPro - X X - X XX X- X 0X -X xxx

Type

T=Tower, C=Compact

U=Upper Keyboard

H=Hanging, R=Terminal

Style

2= Standard, 3=Self service

Display

A=Segment, B=Dot Matrix

CAPACITY

6Kg, 15 Kg, 30 Kg

Load Cell

S=Single D=Dual

Extension Memory

0=Santdard E=With Extension card

Network

0=Ethernet W=Wireless

PRINTER

0=2” printer L=3” (future)

Country finish code

e.g. 071=Singapore

2 Installation

Unpack the Shipping Carton

Open up the package box. Take out the platter ,attachments, then take out the scale. Remove the foam inserts and plastic bag. Put the scale on the working counter and inspect for damage. Report any damage to the carrier promptly. DO NOT LIFT THE SCALE USING THE SPIDER OR BACK DISPLAY. Verify you received the accessories listed below.

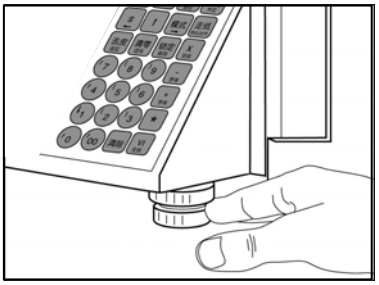
Tower
bPro scale
Platter
Power cord
Operator manual
Security Seal and Quality Feedback card etc.

Note: If you choose to dispose of the package, please recycle the materials. The packaging is recyclable natural fiber with biodegradable adhesives.

Setup Checklist

Leveling	level the unit using the feet for adjustment and bubble indicator as a guide.
Install Tower	Install Display Tower.
Install platter	Put on the platter to scale.
Install label	Install labels in the printer.
Calibration	New scales must be calibrated on site.
Reset RAM	Initialize the scale and set all softswitches to factory default.
Password	To configure the passwords of the specific menus.
keyboard	To configure the function keys and directly access keys of the keyboard.
Operator Configuration	To configure printed media, individual label or ticket or total label.
Label format	To configure default label format.
Barcode	To select bar code type.
Date/Time	To set up current date and time.
Software	BSOFT program, which can be used to download or restore the PLU record, configuration, or other data.

Leveling



Adjust the four feet until the bubble, located under the scale platter, is in the center of the bubble level. Then adjust the foot locks until the feet are secure.

Bubble Level

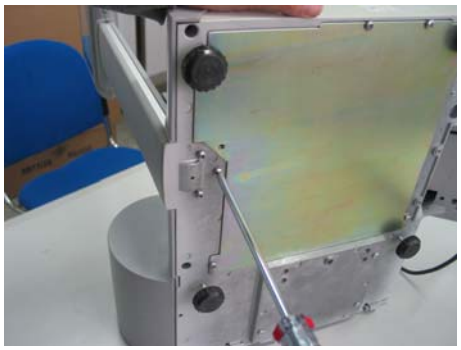
Correct

Incorrect

Install Tower

Tower Model

Take out the tower and insert it into the tower base. Connect the two flat cables together between the tower and the display base. Install four screws on both sides of the display base to lock the tower in place.



Upper Keyboard Model

Connect the two flat cables together between the tower and the display base. Install four screws on both sides of the display base to lock the tower in place.

Install Platter

Take out the platter and put on to the scale.

Power On

Note: If unit has been stored or transported in below freezing temperatures, allow the unit to warm up to room temperature **before** turning on AC power.

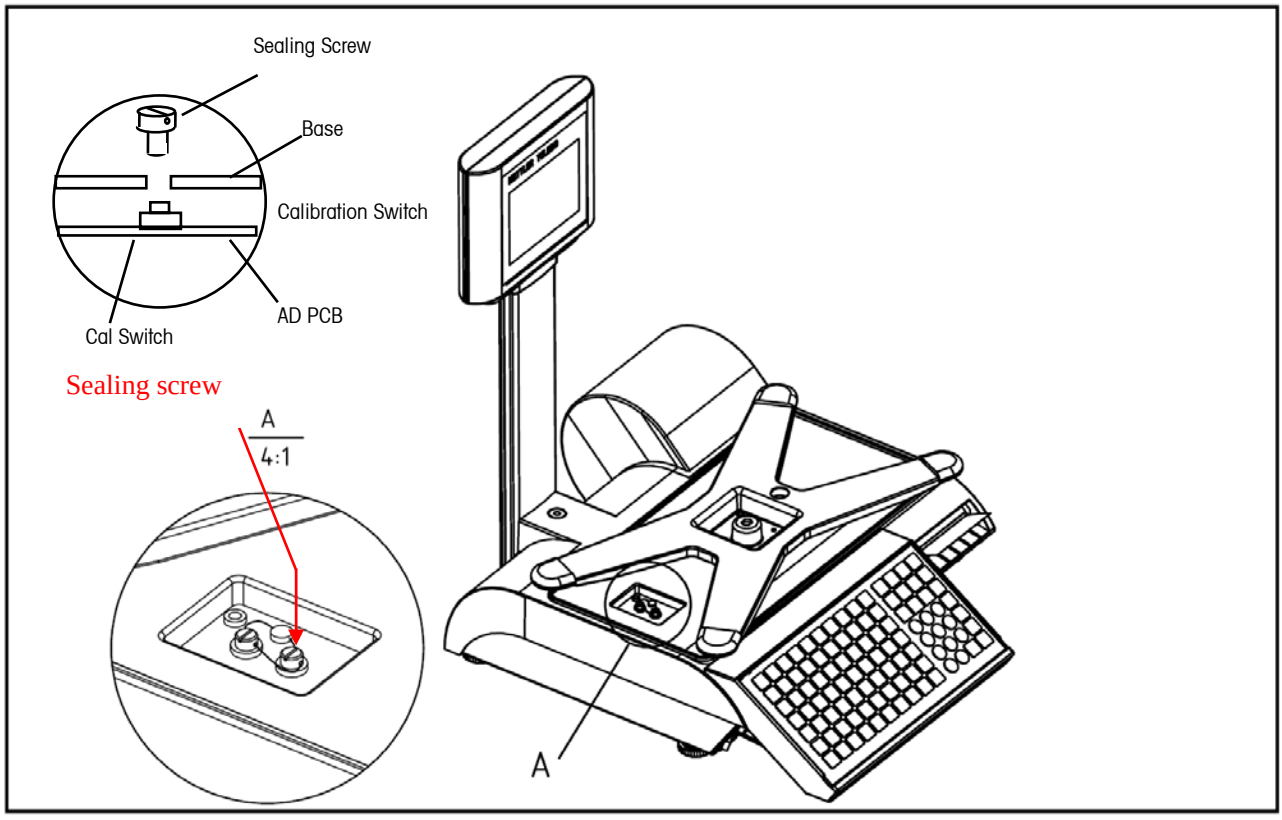
Remove the power cord from the package box. Install the power cord in the recepticle on the bottom of the scale. Connect the power cord to AC power. Set the power switch to the ON position. Allow at least 30 minutes warm-up time before initial calibration.

Label Installation

Open the plastic door on the right side of the scale.
Slide out the printer.
Press the trigger to open the printer head.
Install the labels according to the instruction legend on the printer frame.
Pull out the take-up spool Insert the liner into the spool slot. Push back the spool.
Secure the liner on the take-up spool by spinning the spool clockwise.
Close the printer head gently, until it clicks.
Slide the printer into the scale. Close the plastic door.
Press the ⟲ key to bring the label into the start position.

Note: Please refer to section 3 'Label Format' to set the proper label format.

Calibration



Steps :

1. Snip sealing wire
2. Screw out sealing screw
3. Operation:

operation	display		comments
☞[CODE] ⑨✳	SERVICE FUNCTION		Enter service mode menu
☞⓪⑤✳			Select calibration sub-menu
	DO NOT ENTER CAL	0-1	Enter calibration? 0=NO; 1=YES
☞①			Enter calibration
☞✳	QUIET	0-2	Filter selection, 0=QUIET;1=NORMAL;2=DISQUIET
SELECT THE FILTER			
☞✳	PUSH CAL BUTTON		
☞Push Calibration button			Push the calibration button
	SELECT GEO 12		
☞ (Input GEO value)			Input GEO value , 0—31
☞✳			

	WEIGHT UNIT kg		
☞⊛			
	CAPACITY 15		
☞ (Input capacity)			Input capacity of scale
☞⊛			
	INC.0.002/0.005		
☞Select interval with up arrow key [↑]			Select interval of the scale
☞⊛			
	CAPTURE 0 ———		Read zero
☞⊛			
	ADD WEIGHT 0.000		
☞Input the standard weight value you want to put on scale			Input the standard weight value you want to calibrate, at least 2/3 of capacity
☞put on the standard weight on platter			
☞⊛			
	DONE SHUT DOWN		Power off scale and power on again

NOTE:
IN THE PROCESS IF GIVE THE MESSAGE " INIT. CELL...", WHICH INDICATE THE FAULTCALIBRATION.

3 Setup

Menu Tree for Scale Setup

Navigating within the Setup Menu

- 【ENTER】 Selects displayed item and moves to sub menu level, accepts the variable in the list.
- 【CODE】 Backs up one menu level, does not accept change.
- 【 ↑ 】 Moves Up to next menu item, will wrap around from the last entry to the first.
- 【 ↓ 】 Moves Down to next menu item, will wrap around to end from the first entry.
- 【Clear】 Clears inputted Text for that field. Clear is also used to clear the PLU and clear a warning message

(Direct access numbers CODE xxxxxx ✳ xx
Delete an entry C
Code version CODE ✳)

Menu Tree

To enter setup mode, press the [CODE] key
Press [CODE] key to return to the first option in the current menu. Press [CODE] key again to return to the previous menu. To exit out of SETUP mode, press [CODE] when the display shows normal weigh state.

CODE

DATA ENTRY — 1

101	PRICE CHANGE
102	CREATE PLU
103	COPY PLU
106	EDIT EXTRA TEXT
107	LIST PLU
108	DELETE PLU
109	DEFINE PRESETS
110	LIST PRESETS
111	STANDARD PRESETS
112	DELETE PRESET
114	CREAT GROUP
115	LIST GROUP
116	DELETE GROUP
126	CREATE SP. OFFER
127	SP. OFFER BACKW.
128	DELETE SP. OFFER
129	LIST SP. OFFER
130	TARE
132	CREATE BARCODE
135	TICKET HEADER
136	TICKET BOTTOM
138	RUNNING MESSAGE
139	CREATE OPERATOR
140	LIST OPERATOR
141	DELETE OPERATOR
142	SHOP NAME
143	ADVERISEMENT
144	DATE TEXT
145	DATE / TIME
146	DISCOUNT
147	PACK DATE OFFSET
148	LOGO MESSAGE
149	STORE LOGO NUM
148	MENU END

REPORTS — 2

201	RESET TO DEFAULT
202	SALES REPORT
203	PLU REPORT
204	PROMOTE RPT
205	GROUP REPORT
206	GROUP H REPORT
207	HOURLY REPORT
208	SETTLE REPORT
210	ST/VOID REPORT
211	VENDOR REPORT
212	CASHDRAWER REPORT
213	WEEKLY REPORT
214	MONTHLY REPORT
215	YEARLY REPORT
216	COMBINE REPORT
218	CLEAR REPORTS
219	MENU END

KEYBOARD CONFIG — 3

301	STANDARD CONFIG
302	FUNCTION KEYS
303	SPECIAL KEYS
304	LIST CONFIG
305	MENU END

OPERATOR CONFIG — 4

401	STANDARD CONFIG
402	NEW CONFIG
403	LIST CONFIG
404	MENU END

SCALE CONFIG — 5

501	STANDARD CONFIG
502	NEW CONFIG
503	LIST CONFIG
504	MENU END

SPECIAL FUNCTION — 6

601	COUNTRY FINISH
602	ROUND PRICE
603	DISCOUNT ROUND
605	UNIT OF PRICE
606	UNIT PRICE PRINT
607	PRINT PRICE UNIT
608	WEIGHT UNIT PRINT
609	IF PRINT WGT. UNIT
610	PRINT WITH MOTION
611	PRINT LESS 20E
612	AMOUNT 0 PRINT
616	PLU FORMAT SKIP
617	PLU INPUT TYPE
618	PLU NO. LENGTH
619	PLU NO. PREFIX
620	ET LINK TO PLU
621	PRICE OPEN TYPE
622	DISCOUNT TYPE
623	SPECIAL OFFER
624	OPEN PRICE MARK
625	OPEN PRICE MODE
626	UNIT OF BY-COUNT
627	FIX KEY
628	FIX KEY IN PREPACK
629	2ND LABEL PRINT
630	YEAR LENGTH
631	DATE FORMAT
632	DATE SEPERATOR
633	TIME FORMAT
634	MEMORY CHECK
635	SELL BY FORMAT
636	PACK DATE PRINT
637	WIRELESS OPTION
639	PLU DESC DISPLAY
640	PRECIOUS PRICE
641	IP LST BYTE MASK
642	SWITCH NET MODE
643	DISPLAY NEGA. WEIGHT

LABEL CONFIG — 7

701	SERVICE BY-WEIGHT
702	SERVICE BY-COUNT
703	PREPACK BY-WEIGHT
704	PREPACK BY-COUNT
705	TOTAL LABEL
706	COPY LABEL
707	DELETE LABEL
708	MENU END

PASSWORD — 8

801	STANDARD CONFIG
802	MANAGER PASSWORD
803	SCALE PASSWORD
804	CODE PASSWORD
805	PRICE CHANGE PSW.
806	DISCOUNT PSW.
807	CLEAR PASSWORD

SERVICE MODE — 9

901	FUNCTION TEST
902	MEMORY TEST
903	INTERFACE TEST
904	HIGH RESOLUTION
905	CALIBRATION
906	ERROR REPORT
907	APPLICATION
908	PRIMARY CONFIG
909	TICKET NO. TO 0
910	SET FILTER
912	CLEAR BRAM
913	FONTS TABLE
915	WORK CONFIG
917	DELET ALL PLU
918	DELETE ALL GROUP
919	DEL. ALL OPERATOR
921	NETWORK CONFIG
922	SOFTWARE LOAD
924	TICKET PRINTER
925	LABEL PRINTER
926	CONFIG INTERFACE
928	HEAD CLEAN ALERT
929	CHANGE PAPER MSG
932	COMM DEBUG
933	ASSERT DEBUG
934	CASHDRAW TEST
935	WIRELESS CONFIG
936	USB TEST
937	PRINT ALL TEXT
938	PRINT MENU LIST
941	CHECK FONT

644	**CHANGE LANGUAGE**
646	**PLU NO. Length**
648	**EAN13 Style**
649	**PP PLU INPUT**
650	**CHAIN TARE**
651	**MARK DOWN**
652	**PLU DISPLAY FONT**

Enter setup

To enter setup mode, press the [CODE] key.

Exiting setup

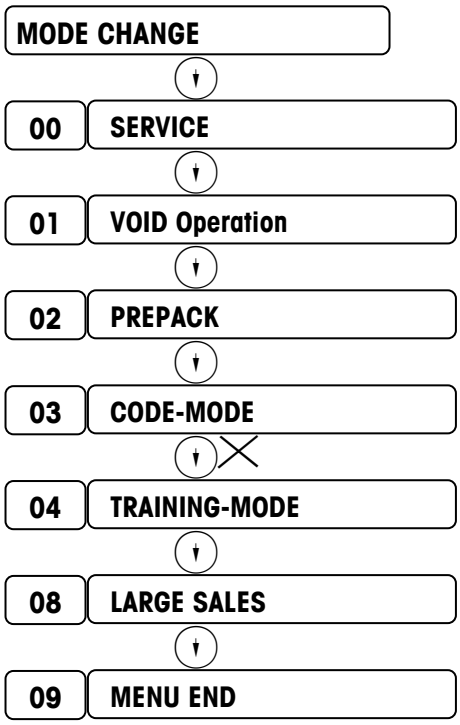
Press [CODE] key to return to the previous menu. To exit out of setup mode, press [CODE] when the display shows normal weigh state.

Mode functions

Press (MODE) Call the menu "MODE CHANGE"

Overview of mode functions

Call the menu "MODE CHANGE"



With ↑ ↓ select the desired sub-menu, or enter the preset code.

Select/return to service mode.

Select/return to void operation mode.

Select/return to prepack mode.

Select/return to code mode.

Select/return to training mode.

Select/return to large sales mode.

Press ↑ to continue or ✳ to return to weighing mode.

With ↑ ↓ or the preset code, select the corresponding menu item, then activate it with the ✳ key.

Service mode

-For all weighing functions, registering, data entry and sales reporting

Code mode

-Enter the code functions

Training mode

-Learning and practical exercises on the device, without the realized turnover being memorized.

-The display reads "TRAINING"

Void oper. mode

-VOID OPERATION AFTER CHECK OUT means the ticket or label has been printout, and these transactions will be deleted from the statistics data.

Prepack mode

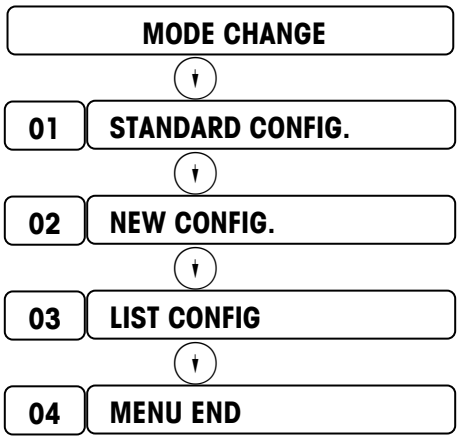
-For packing fieldwork of the supermarket. In this application, only print label, the small variety but large quantity print-work.

Large sales mode

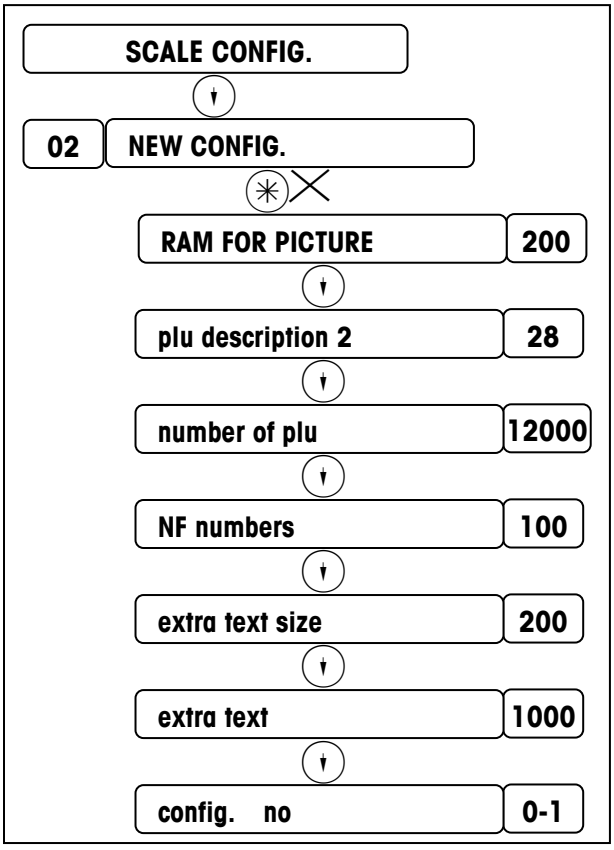
-When the article is too big to weigh, operator can enter this mode by inputting the article weight and count price.

SCALE CONFIGURATION

CODE 5 ✳ Call the menu "Scale configure", this menu for distributing the memory of scale.



new configuration:



Enter preset code 02

Enter the RAM size for the pictures includes STORE LOGO, PLU Graphics, SafeHandling, Screen Saver. Range 0-500.

Enter the quantity of PLU DESCRIPTION 2 characters. Range 0-150.

Enter the quantity of PLU in the scale. Range 50-25000.

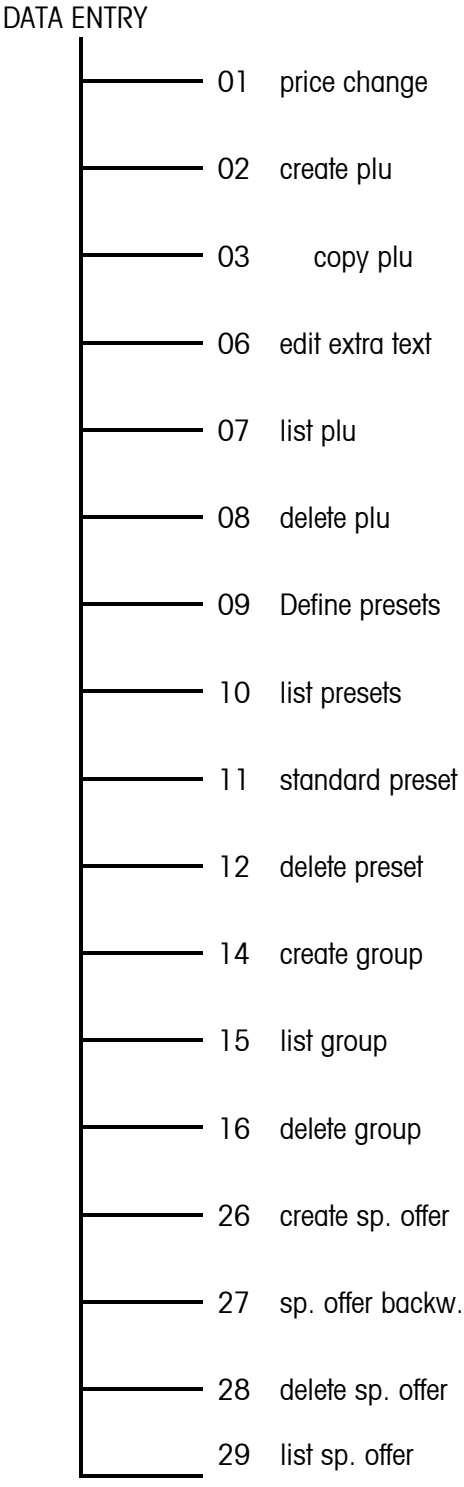
Enter the Nutritional facts quantity. Range 0-100.

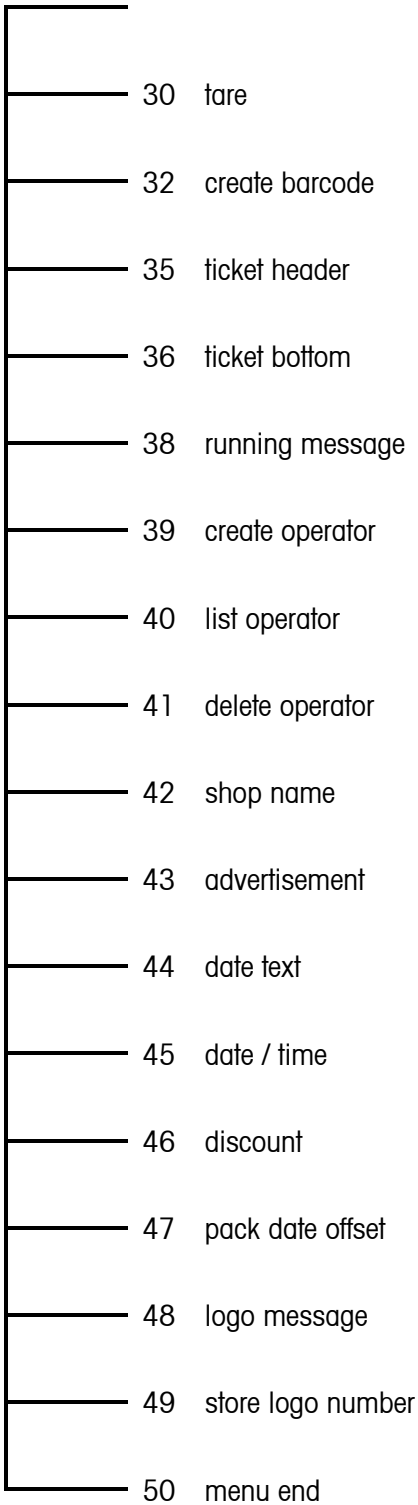
Enter the max. extra text size of each one.
Range 0-500.
Enter the extra test quantity for the scale. Range 0-20000.
(Actual number depends on previous setting, use the rest memory after previous data).
whether to save the change 0=no;1=yes

Will show the actual number for PLU QTY, ET size and QTY.

DATA ENTRY

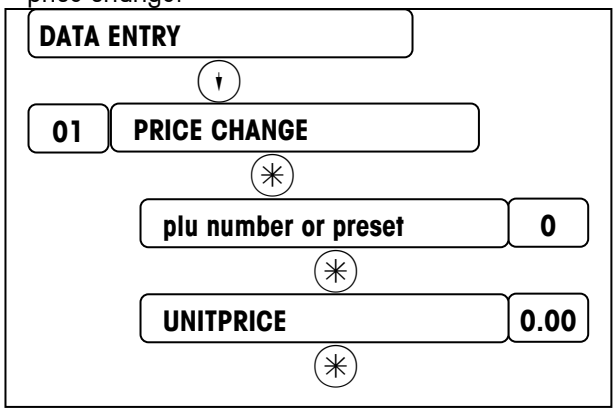
☞ CODE 1 ✳ **Call the "DATA ENTRY" menu**





Select desired menu with ↑↓ or enter preset code and activate with ✳ key.

price change:

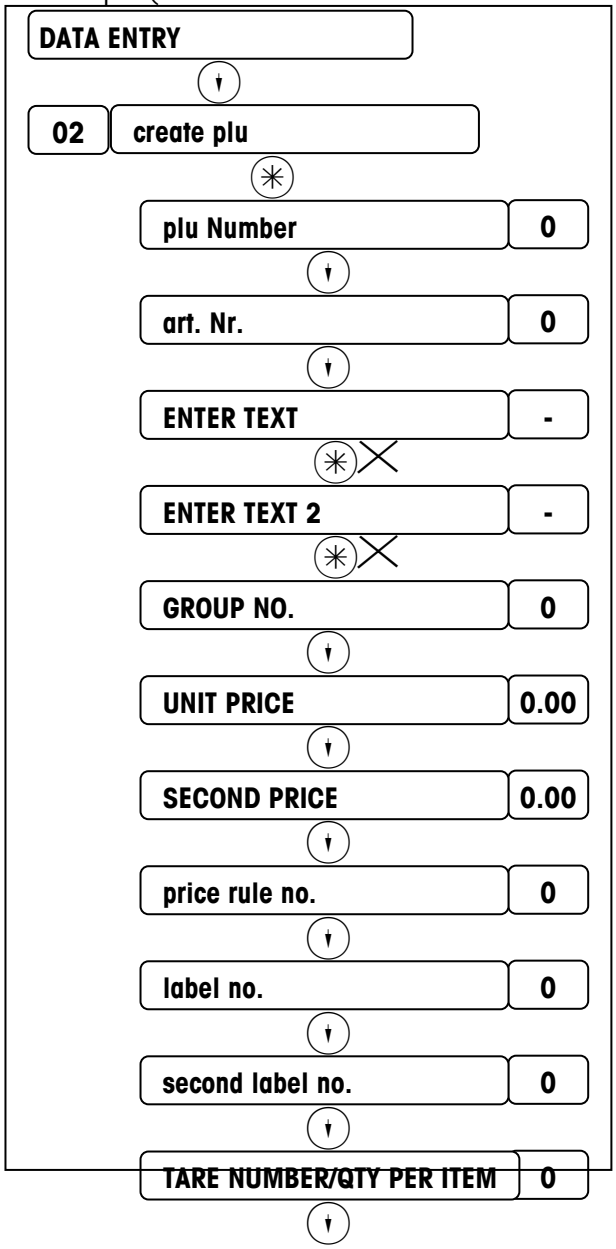


enter the preset code 01

enter the PLU number or press the preset key to choose PLU

enter new price

create plu:(each item can be chosen in menu "code-6-16(plu format skip)"



Press the ↑ key twice or enter the preset code 02.

Enter the PLU number.(1~999999)

Enter the article number (up to 13 figures).

Enter the commodity text (up to 28 characters)

Enter the 2nd commodity text (up to 150 characters, see SCALE CONFIGURATION, 10 lines as use ↑ key to change)

Enter the article group number. (1~99)

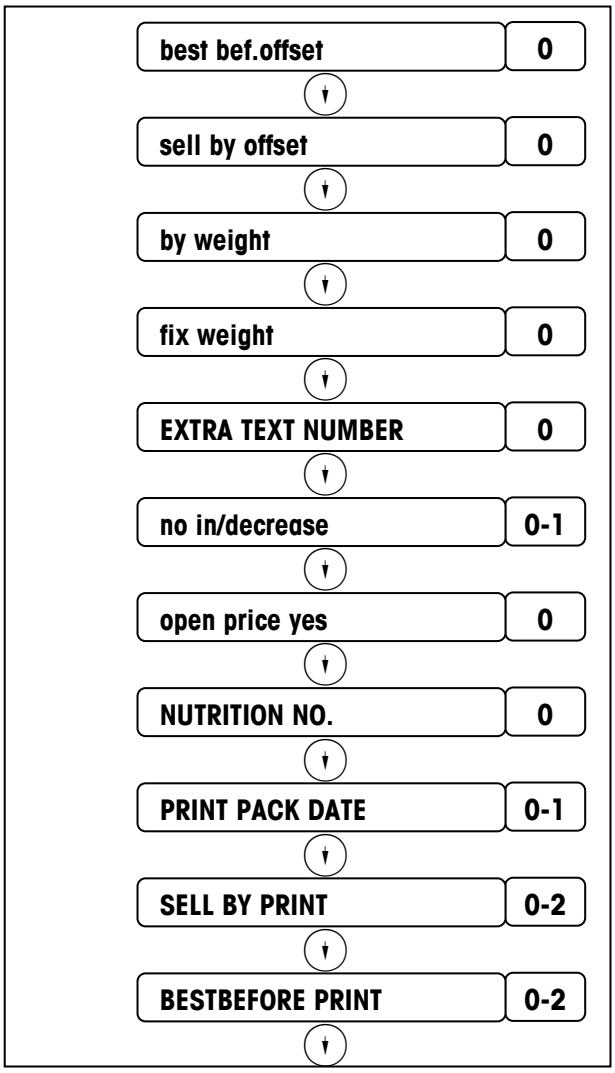
Enter the unit price. (0~9999.99)

Enter the second price if necessary.

select which unit price as calling out PLU. 0,1: 1st Unit Price 2: 2nd Unit Price;3 -10: link to discount number

Input the label number (0-108, 101~108 are fixed label formats)
Input the second label number if necessary.

Tare number for by weight PLU 0=no tare, 1~16=tare number
Quantity for by count PLU 0-9999



Enter the best before offset(0~999)

Enter the sell by offset(0~999)

Is it an article per piece or a weighed article ?
0 = weighed article,1 = article per piece

Enter the FIX WEIGHT for article per piece

Enter the Extra text number

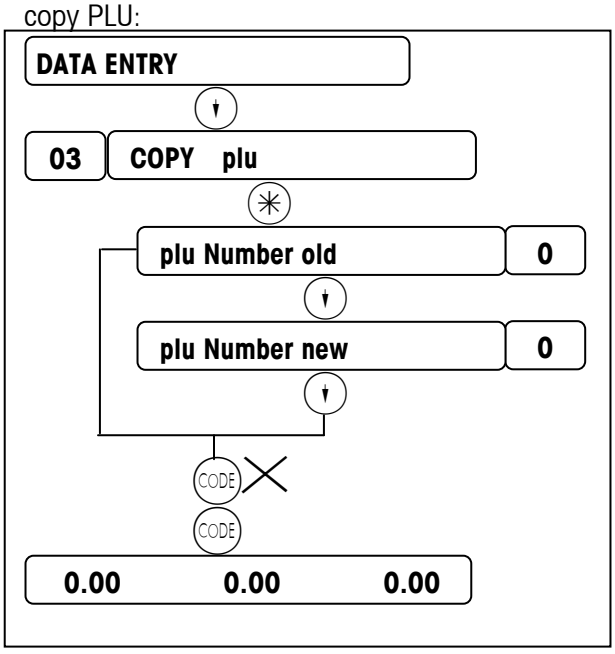
0=don't allow in./decrease
1=allow in./decrease

0=price can't be changed
1=price can be changed by # key
Enter the nutrition number

if print the pack date,0- 4
Not print/yymmdd/mmdd/mmddyy/ddmmyy

SELL BY DATE format,0-5
Not print/yymmdd/mmdd/mmddyy/ddmmyy/days
BEST BEFORE DATE format,0-5
Not print/yymmdd/mmdd/mmddyy/ddmmyy/days

copy PLU:



enter preset code 03

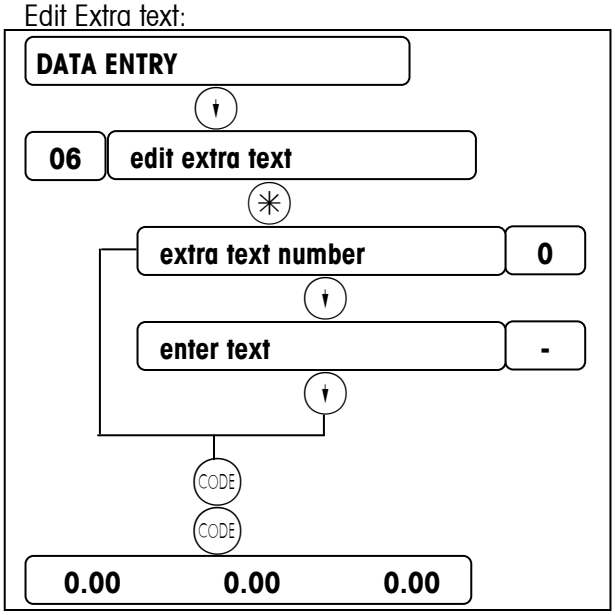
enter PLU number

enter PLU number

copy next plu,

return to weighing mode

Edit Extra text:



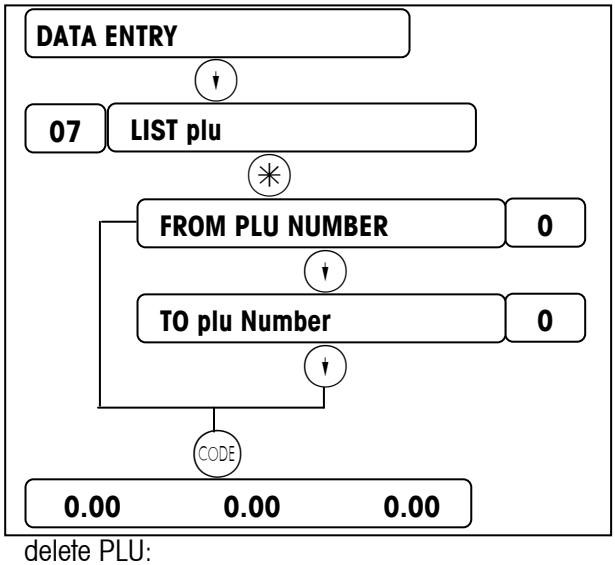
enter preset code 06

enter extra text number

enter the Extra text (use the ✳ you can change line)

return to weighing mode

list PLU:

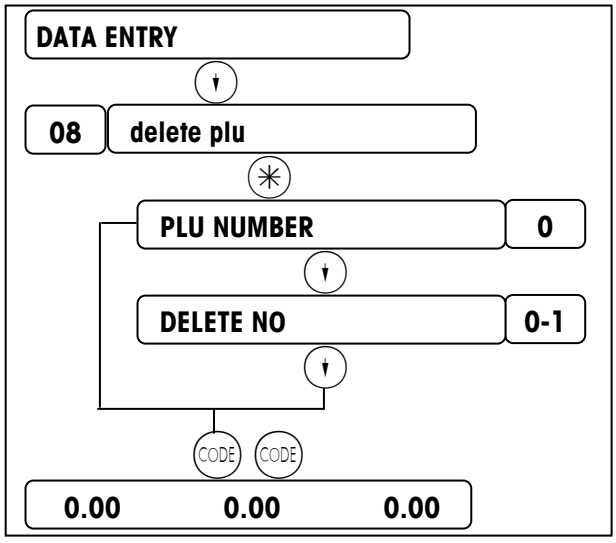


enter preset code 07

enter PLU number(0=all PLU)

enter PLU number(0=all PLU)

delete PLU:



enter preset code 08

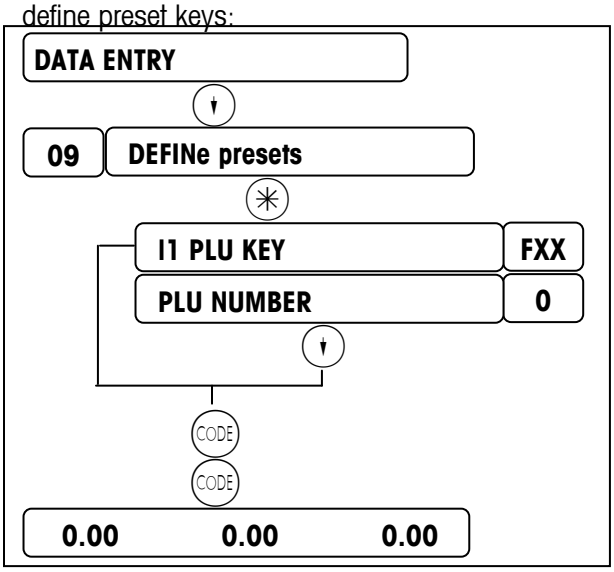
enter PLU number

0=not delete;1=delete

clear next PLU

return to weighing mode

define preset keys:

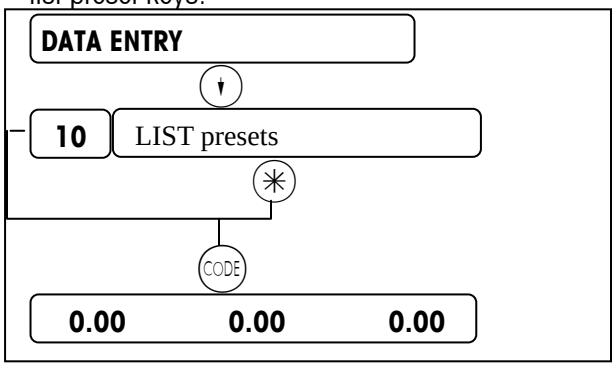


enter preset code 09

press a preset key(you can choose the layer L1 or L2 by press the key ⓘ)L1=level 1 ;L2=level 2
enter the PLU number
define next preset key

return to weighing mode

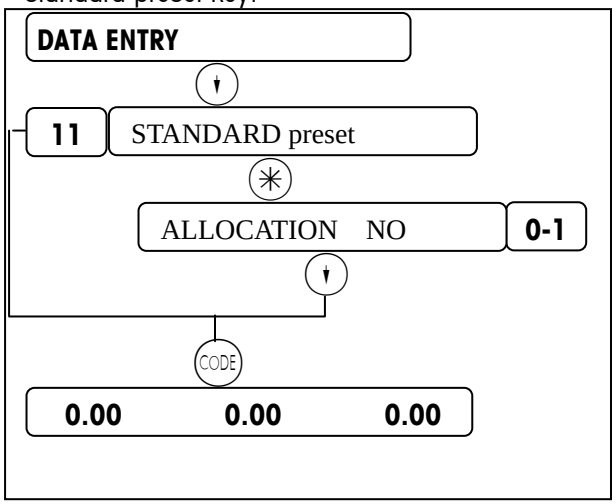
list preset keys:



enter preset code 10

print the list

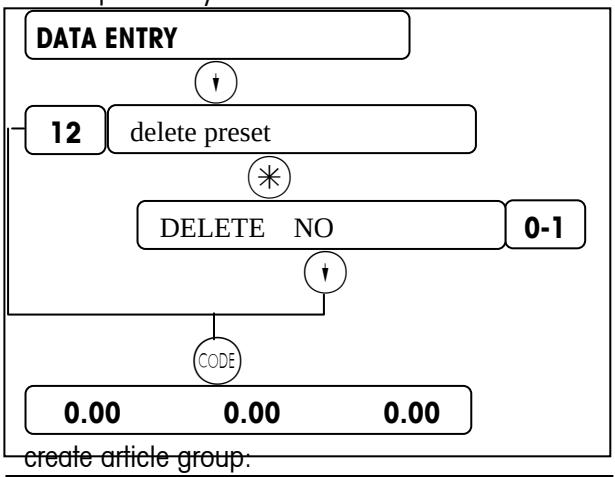
standard preset key:



enter the preset code 11

0=not allocate,1=automatic allocation by the system(plu 1-F001)

delete preset key:

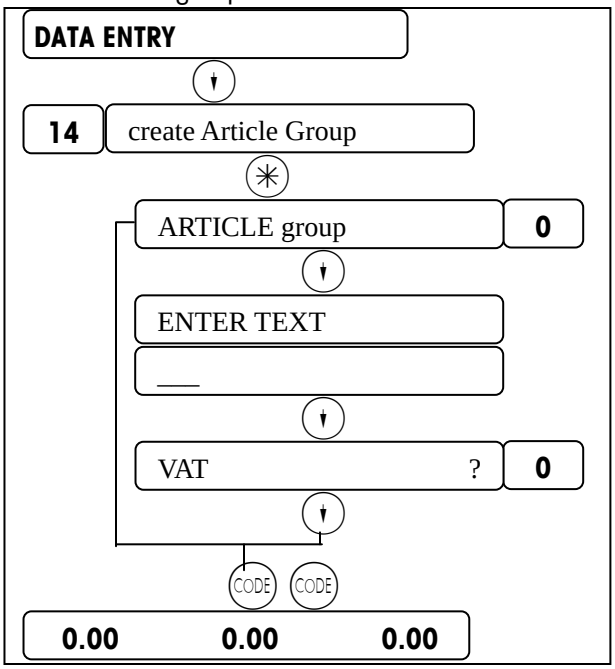


enter the preset code 12

0=not delete,1=all preset keys are cleared

return to weighing mode

create article group:



enter preset code 14

enter group number

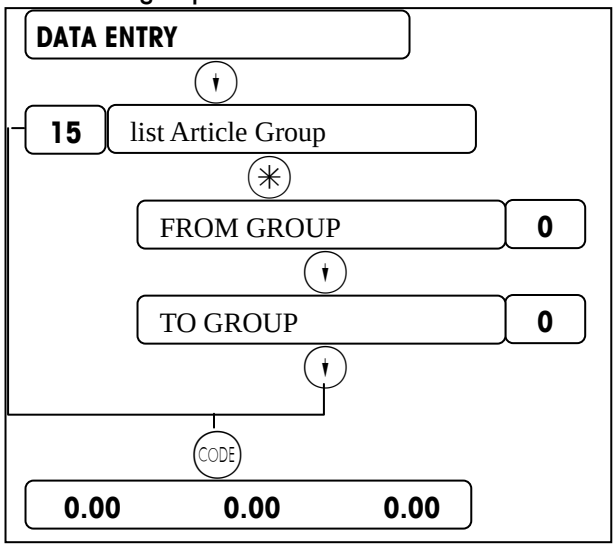
enter group name(18 characters)

Input the TAX of this group

difine next group

return to weighing mode

list article group:



enter preset code 15

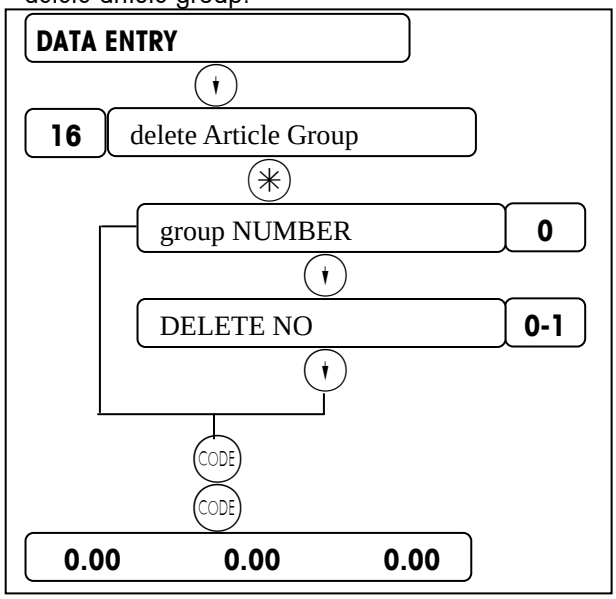
enter group number (0=all group)

enter group number (0=all group)

printing the list of group

return to weighing mode

delete article group:



enter preset code 16

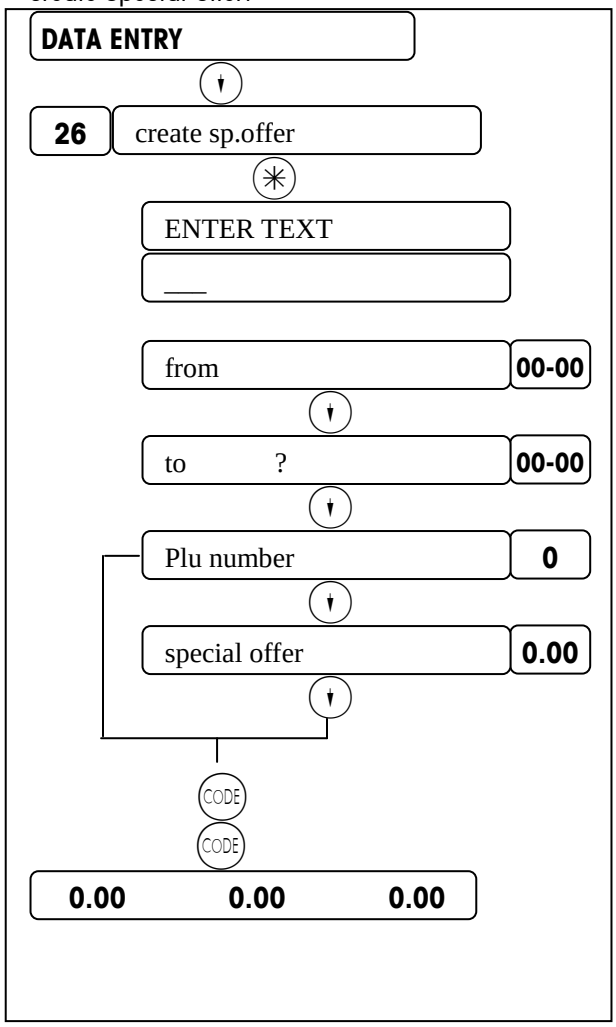
enter group number

0=not delete;1=delete

delete the next group

retun to weighing mode

create special offer:



enter preset code 26

enter the detail of special text

enter the start time for all special offer

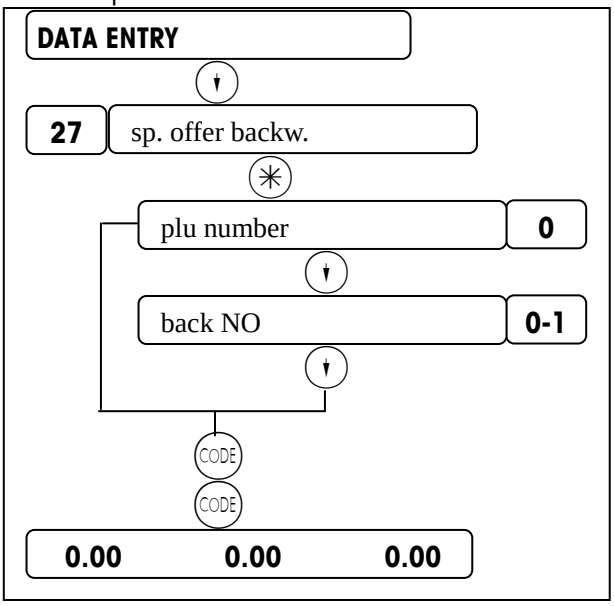
enter the end time for all special offer

enter PLU number

enter the special offer PRICE

return to weighing mode

forbid special offer:



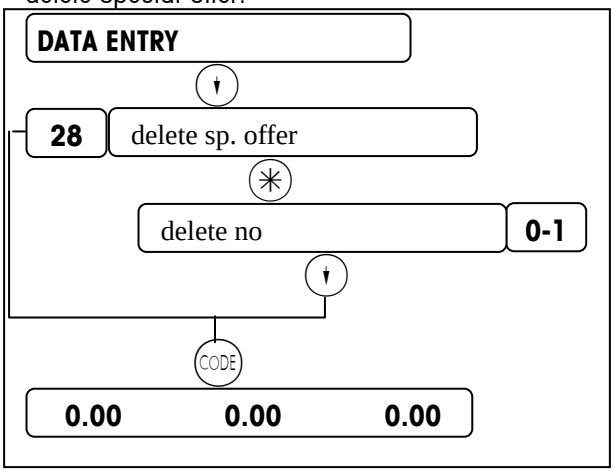
enter preset code 27

enter PLU number

0=No prohibition, 1=Prohibit SP. OFFER for this PLU

retun to weighing mode

delete special offer:

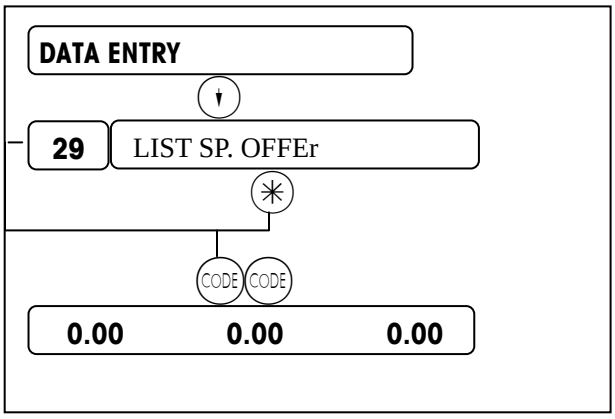


enter preset code 28

delete the special offer
0=not;1=yes

return to weighing mode

list special offer:

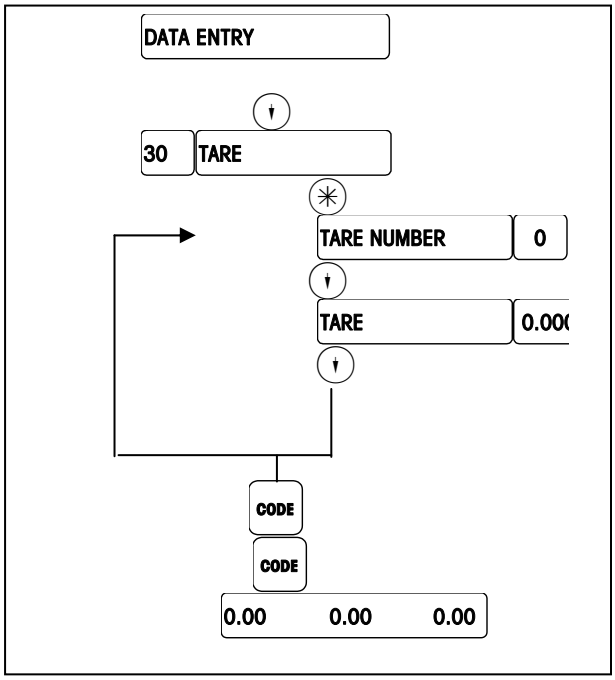


enter preset code 29

Print the special offer list

return to weighing mode

Tara weight:



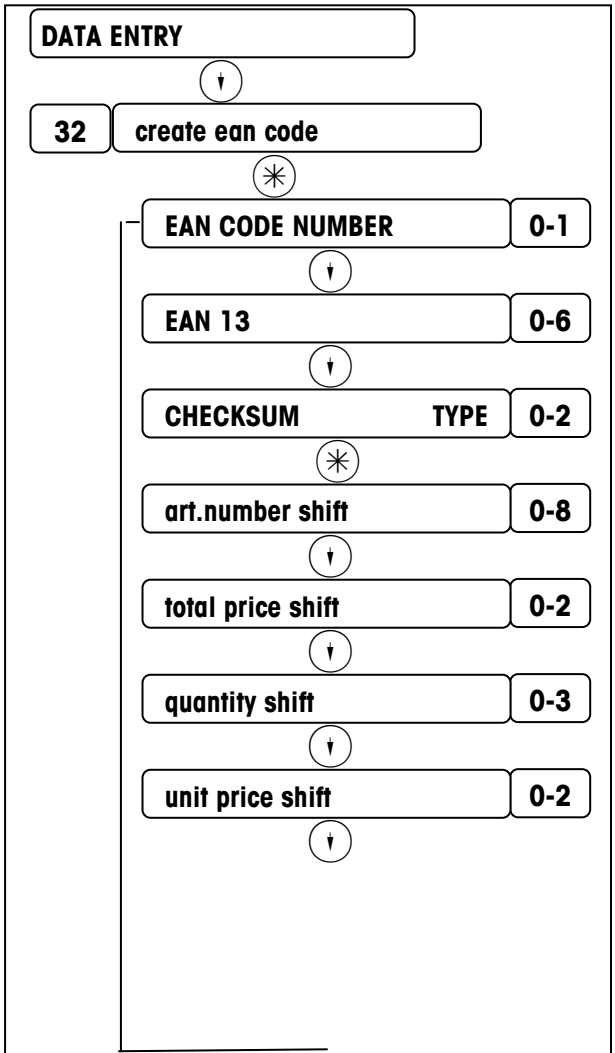
Enter the preset code 30

Enter the tare number (1-16).

Enter the tare weight in grams *) or put the empty recipient on the scale, then validate with the tare key (T).
Press (↑) to affect the next tare memory.
Press the (CODE) key twice to return to the weighing mode.

*) Respect the increment (1 g, 2 g or 5 g, depending on the weighing range)

create EAN code:



enter preset code 32

enter EAN code number(1-8):1=for ticket and 2-8 for label

select barcode type,0=EAN 8;1=EAN 13;2=ITF 25 NARROW;3=ITF 25 WIDE;4=EAN128;5=EAN 13+5;6=UPC-A

Select check sum type,0=normal;1=reverse;2=no check sum

select Article number shift in barcode.

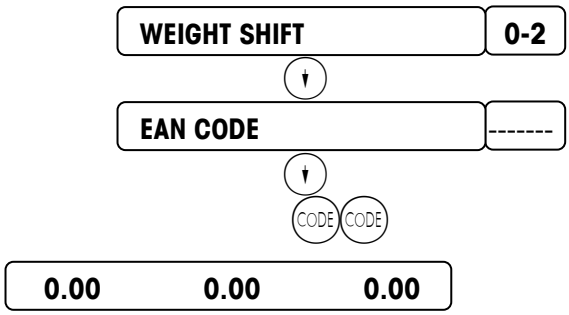
select total price shift in barcode.

select quantity shift in barcode.

select unit price shift in barcode.

select weight shift in barcode.

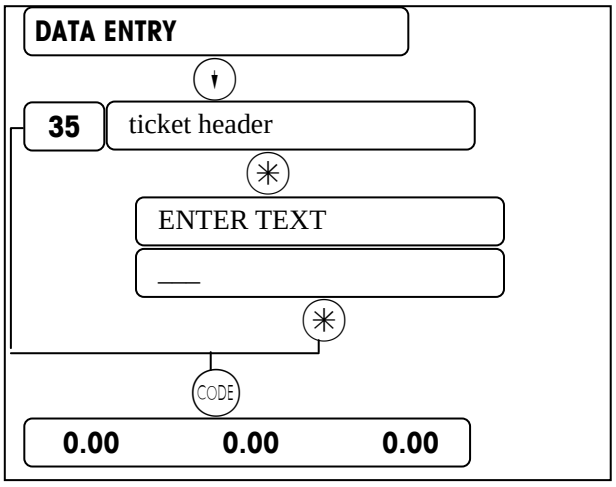
As you use EAN 13 code format,max.13 figures,13th figure=check digit, you must enter 12 figures.
(As youuse EAN 25 code format,max.18 figures,18th figure=check digit, you must enter 17 figures.



LEGEND OF EAN INDENTIFICATION	
A=article number	up to 13 figures
C=checkdigit	1 figure
D=date	6 figures
P=PLU code	6 figures
W=group number	2 figures
B=amout	5/6 figures
Q=quantity	4/5 figures
0-9 Figures	12 figures
Example:	
Figures 1-6: 0-9,W,P	=Possible entry
Figures 7+8: C	=Possible entry
Figures 8-12: B,Q,0-9	=Possible entry
Figures 13: C	=Possible entry

Examples:
0AAAAAAAAAA (UPC, Ten digit Item Number)
2AAAAACBBBB (UPC, 5-D Item/Price Check Digit/4-D Price)
2AAAAA0BBBB (UPC, 5-D Item/Zero Fixed/4-D Price)
2AAAAABBBBB (UPC, 5-D Item/No Price Check/5-D Price)
2AAAAACQQQQ (UPC, 5-D Item/Wgt Check Digit/4-D Wgt)
2AAAAAQQQQ (UPC, 6-D Item/No Price Check/4-D Wgt)
2AAAAAQQQQQ (UPC, 5-D Item/No Price Check/5-D Wgt)
21AAAAABBBBB(EAN,5-D Item/5-D Price)
21AAAABBBBBB(EAN, 4-D Item/6-D Price)
21AAAAACBBBB(EAN,5-D Item/Price Check Digit/4-D Price)
21AAAACBBBBB(EAN,4-D Item/Price Check Digit/5-D Price)
21AAAAAQQQQQ(EAN,5-D Item/5-D Wgt)
21AAAACQQQQQ(EAN,4-D Item/Wgt Check Digit/5-D Wgt)

define ticket header:

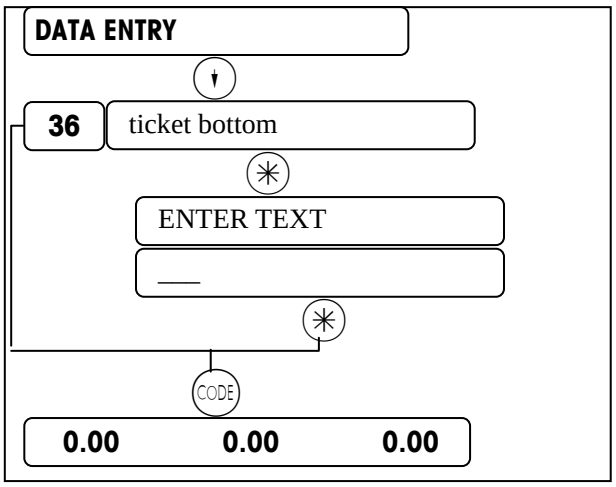


enter preset code 35

enter text(Max.4 lines;100 characters)

return to weighing mode

define ticket bottom:

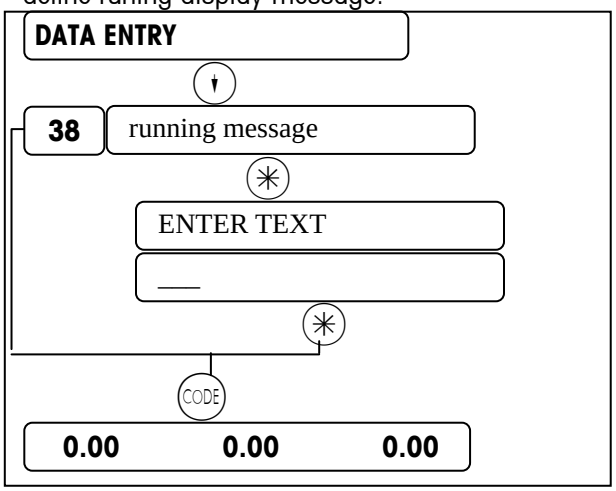


enter preset code 36

enter text(Max.4 lines;100 characters)

return to weighing mode

define runing display message:

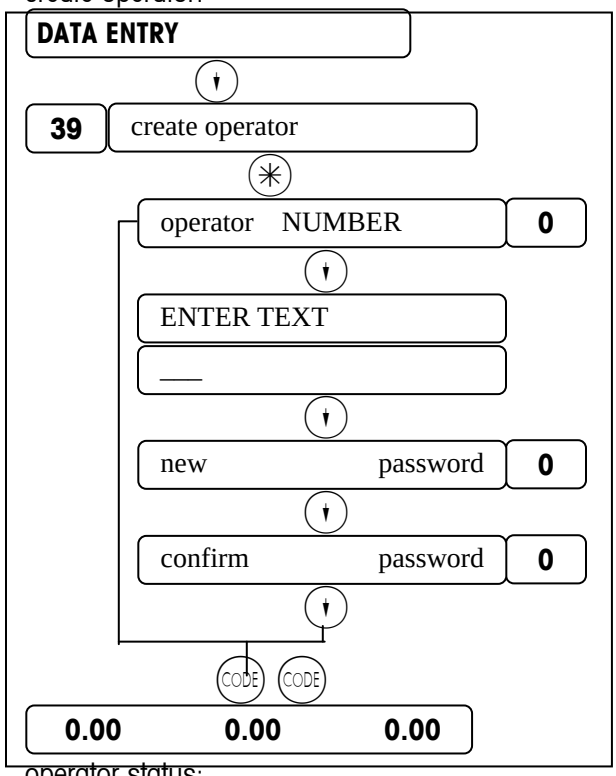


enter preset code 38

enter text(Max.100 characters)

return to weighing mode

create operator:



enter preset code 39

enter operator number(1-5)

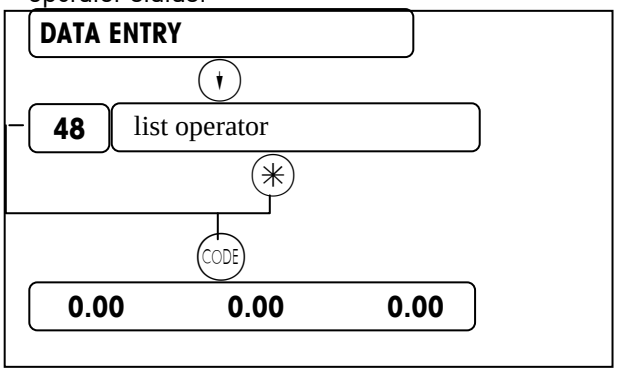
enter operator name(18 characters)

enter password of this operator if necessory

confirm password
define next vendor

return to weighing mode

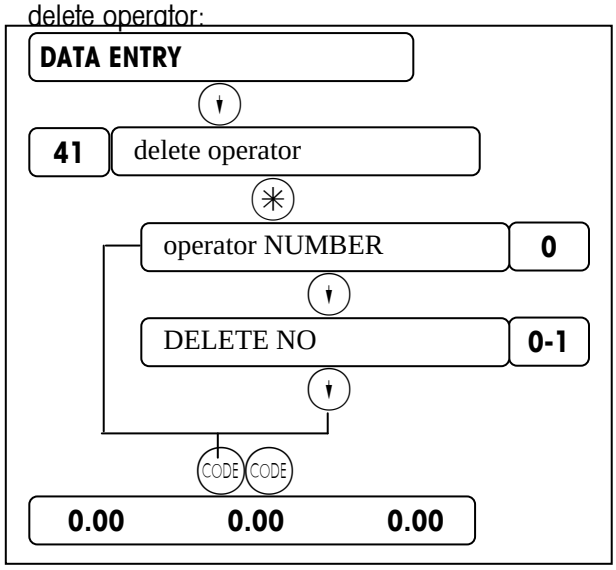
operator status:



enter preset code 40

print the list

delete operator:



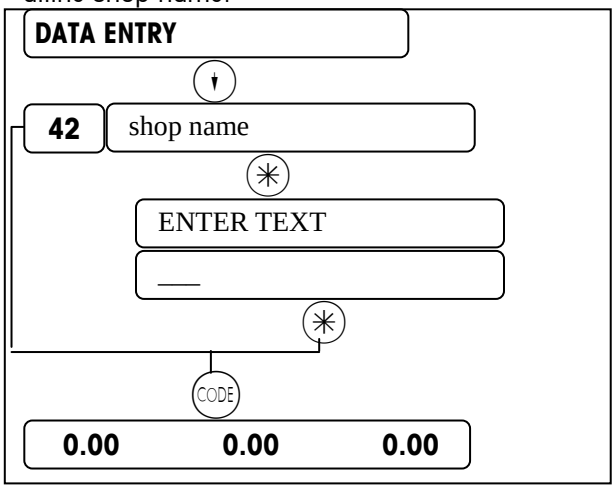
enter preset code 41

enter operator number(1-5)

0=nor delete;1=delete
delete next operator

return to weighing mode

difine shop name:

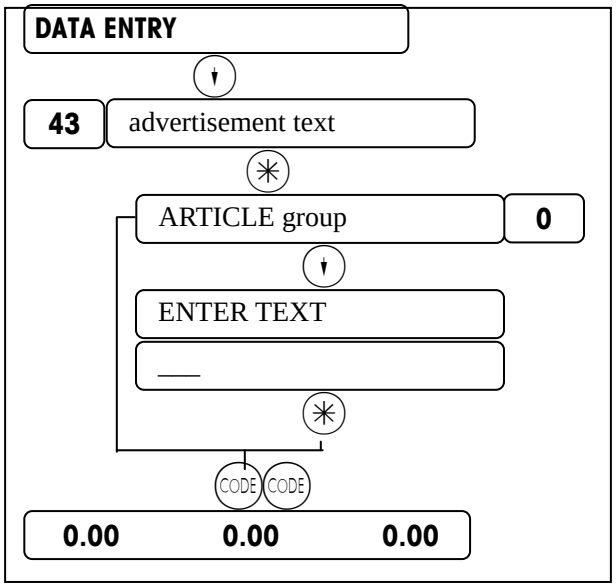


enter preset code 42

enter text(4 lines,100 characters)

return to weighing mode

define advertisement text:



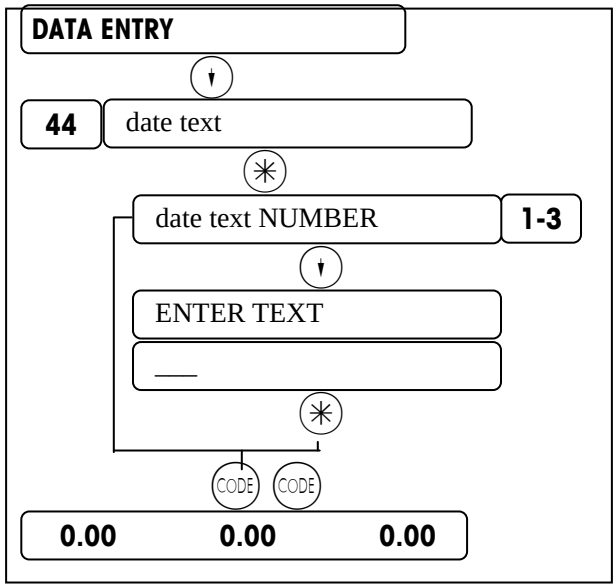
enter preset code 43

1-10 advertise text number

enter text(1 lines,60 characters)

return to weighing mode

define date text :



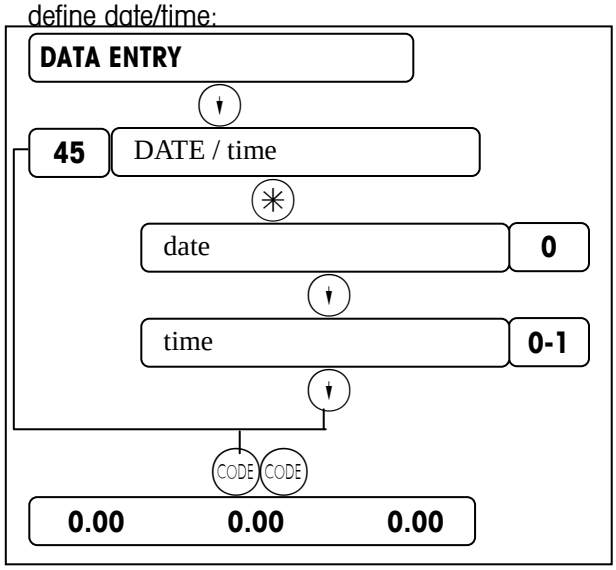
enter preset code 44

0=none ;1-3 date entry

enter text(18 characters)

return to weighing mode

define date/time:



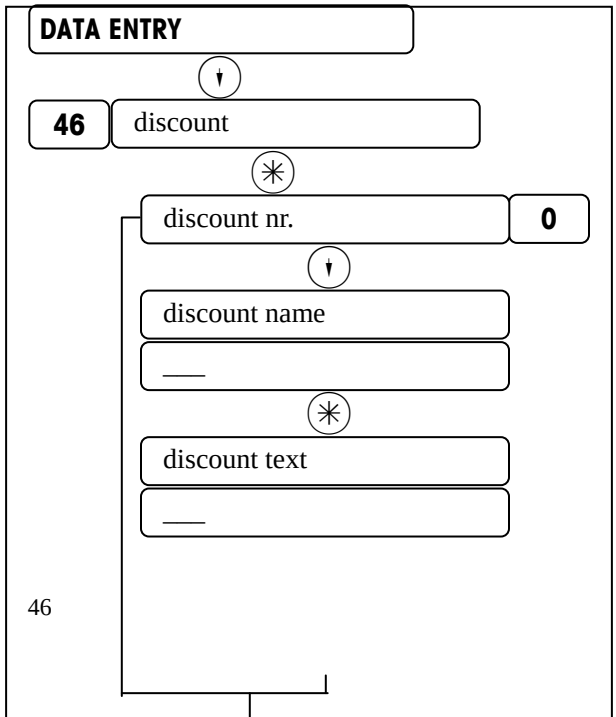
enter preset code 45

enter date (the format in [setup]-6-31 menu)

enter time in format:HH-MM-SS (the format in [setup]-6-33 menu)

return to weighing mode

define increase/decrease:



enter preset code 46

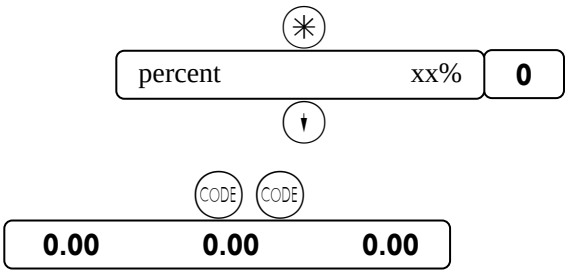
enter increase/decrease number(1-16)

enter increase/decrease name

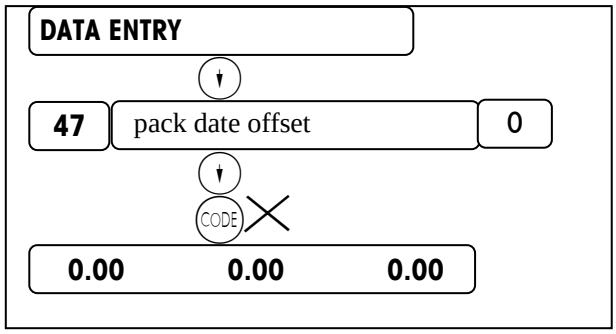
enter increase/decrease text

enter increase/decrease rate

return to weighing mode



define pack date offset:

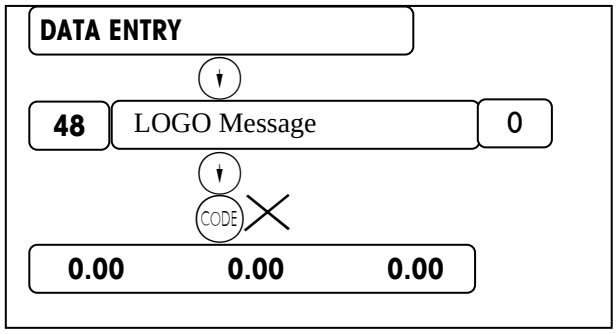


enter preset code 47

input the pack date offset number.

return to weighing mode

define LOGO message:

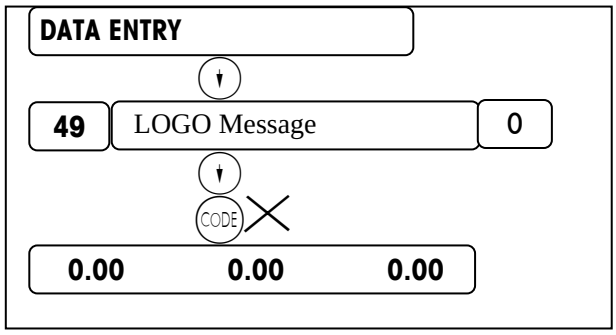


enter preset code 48

input the message showed after "SYSTEM LOADING", up to 16 characters.

return to weighing mode

define store LOGO:



enter preset code 49

enter store logo number(0-255)

return to weighing mode

Keyboard configuration

Enter the menu【CODE】【3】【*】,display will show "KEYBOARD CONFIG", then do following operation.

Standard configuration

☞【01】【*】⇨display "CONFIG. NO"
☞press key: 0＝NO，1＝YES，then press【CODE】 key, and press 【CODE】 key exit SETUP mode.

Function keys

☞【02】【*】⇨display "KEY ST ON 0-1"
☞ to active key "ST", 0＝OFF (disable), 1＝ON (enable), press【*】key, display next option "KEY R ON 0-1";
☞ to active key "R", 0＝OFF (disable), 1＝ON (enable), press 【*】 key, display next option "KEY X ON 0-1";
☞ to active key "X", 0＝OFF (disable), 1＝ON (enable), press 【*】 key, display next option "KEY - ON 0-1";
☞ to active key "-", 0＝OFF (disable), 1＝ON (enable), press 【*】 key, display next option "KEY + ON 0-1";
☞ to active key "+", 0＝OFF (disable), 1＝ON (enable), press 【*】 key, display next option "KEY # ON 0-1";
☞ to active key "#", 0＝OFF (disable), 1＝ON (enable), press 【*】 key, display next option "KEY TARE ON 0-1";
☞ to active key "TARE", 0＝OFF (disable), 1＝ON (enable), press 【*】 key, display next option "KEY FIX ON 0-1";
☞ to active key "FIX", 0＝OFF (disable), 1＝ON (enable), press 【*】 key, then press key 【CODE】to exit the setting mode.

Special keys

☞【03】【*】⇨display "OPERATOR KEYS 1"
☞input the quantity of operator, then press key 【*】, display "NO IN/DECREASE 0-1"；
☞to select if use the DISCOUNT key, press key 0＝NO (disable)，1＝YES (enable),as select "NO", press key【*】, display "CONFIG NO 0-1", then press 0（not save）/1（save）, press key 【*】to finish. As select "YES" to enable the DISCOUNT key, display "DISCOUNT NO.", then show "CONFIG NO 0-1",press key 0（not save）/1（save）, press key 【*】to finish.
☞press key 【CODE】 to exit SETUP mode.

List CONFIG

Print out current keyboard config.

Operator configuration

Enter the menu【CODE】【4】【*】,display will show "OPERATOR CONFIG", then do following operation.

Standard configuration

☞【01】【*】⇨display "CONFIG. NO"
☞ press key 0＝NO，1＝YES，then press key 【*】. Press 【CODE】 to exit SETUP mode.

New configuration

☞【02】【*】⇨display "SERVICE MODE 0-1"
☞select the mode as power on: 0＝SERVICE MODE, 1＝PERPACK MODE, press key 【*】, then display next option "DATE & TIME 0-2";
☞ select print paper, 0＝TICKET, 1＝LABEL, 2＝LABEL+TOTAL LABEL , 3＝TOTAL LABEL , press key 【*】 , then display next option "DATE+TIME 0-2";
☞select display contents as idle, 0＝RUNNING MESSAGE , 1＝DATE+TIME , 2＝BOTH OFF , then press key 【*】, display next option "SCREEN SAVER 0-5";
☞select the idle time before displaying screen saver pictures: 0＝NO SCREEN SAVERS, 1＝TWO MINUTES, 2=THREE MINUTES, 3=FOUR MINUTES, 4=FIVE MINUTES, 5=SIX MINUTES, press key 【*】, then display next option "ONE SECOND 0-5";
☞select the interval of screen saver pictures: 0＝ONE SECOND, 1＝TWO SECONDS, 2=THREE SECONDS, 3=FOUR SECONDS, 4=FIVE SECONDS, 5=SIX SECONDS, press key 【*】, then display next option "TARE DISPLAY 0-1";
☞select if show and print tare, 0＝TARE DISPLAY , 1＝NO TARE , then press key 【*】, display next option "PR. INPUT W/# 0-1";
☞select inputting temporary price method with # key, 0＝PR. INPUT W/# , 1＝PR.INPUT W/O # , then press key 【*】. Press key 【CODE】 to exit SETUP mode.

List Config

Print out the OPERATOR CONFIG

Special function

Enter the menu【CODE】【6】【*】,display will show "SPECIAL FUNCTION", then do selection as following.

NO.	NAME	OPTIONS	DESCRIPTION
01	Country Finish		Country selection
02	Round Price	0=do not round; 1=round price; 2=round cut; 3=round carry; 4=round 1/4	Select round price method
03	Discount round	0=as default; 1=no not round; 2=round price; 3=round cut; 4=round carry; 5=round 1/4	After discount, round price
05	Unit of price	0= /kg; 1= /500g; 2= /100g; 3= /50g; 4= /g	Select the unit of unit price
06	Unit price print	0= /kg; 1= /500g; 2= /100g; 3= /50g; 4= /g	Select the unit of printing on label
07	If print price unit	0= print on label; 1=not print	If print unit of unit price on label
08	Weight unit print	0=kg; 1=g;	Select weight unit for printing
09	If print weight unit	0= print on label; 1=not print	If print weight unit on label
10	Print with motion	0=back to 20E; 1=without motion 2=with motion	Select if print label as weight changed
11	Print less 20e	0=disable; 1=enable	6/15Kg, 20e=40g, 15/30Kg, 20e=100g
12	Amount 0 Print	0=disable 1=enable	If print as amount 0
16	Plu format skip	0=default config.; 1=customer zed	Select items in create PLU menu
17	Plu input type	0=with [v..] key 1=press [*]then [V..]	Select call PLU method
18	PLU NUMBER LENGTH	0=no limitation 1=enter PLU length	
19	PLU NUMBER PREFIX	0=with zero prefix	

		1＝without zero prefix	
20	ET LINK TO PLU	0=not link to PLU 1＝link to PLU	Set the Extra text number the same as the PLU number
21	PRICE OPEN TYPE	0=depends on PLU 1=all enable 2=all disable	Select if all PLUs allow to change price temporary
22	DISCOUNT TYPE	0=depends on PLU 1=all enable 2=all disable	Select if all PLUs allow to discount price
23	SPECIAL OFFER	0=depends on PLU 1=all enable 2=all disable	Select SPECIAL OFFER method
24	OPEN PRICE MARK	0=free price 1=lower price	Price change limitation
25	OPEN PRICE MODE	0=temporary 1＝permanent	If save the temporary price to PLU
26	FIX WEIGHT	0=as fix weight 1=as by_cnt unit 2＝minimum weight	Select FIX WEIGHT item function
27	FIX KEY	0=fix key active 1=fix key inactive	Select FIX KEY enable or disable
28	FIX KEY IN PREPACK	0=fix key active 1=fix key inactive	Select FIX KEY enable or disable in PREPACK mode
29	2ND LABEL PRINT	0=disable 1=enable	Select if print second label
30	Select Year Length	0=YY 2 digits； 1=YYYY 4 digits	Select the year format
31	DATE FORMAT	0=YYMMDD 1=DDMMYY 2=DDMMYY(CHR) 3＝MMDDYY 4=DDMMMYY(CHR)	Select date format on display and receipt (not label)
32	DATE SEPARATOR	0="/" 1="." 2="," 3="-"	Select separator between date
33	TIME FORMAT	0=24 hours 1＝12 hours	
34	Memory check	PLU：XXXX，LEFT：YYYY	Display the PLU quantity and left space
35	SELL BY FORMAT	0=not print today 1=print today	Select start date of sell by
36	PACK DATE FORMAT	0=by label 1=by best before 2=by sell by	Select if print pack date
37	WIRELESS OPTION	0=without wireless 1＝with wireless	If use wireless
39	PLU DESC.DISPLAY	0=no display 1＝display PLU l1 2＝scrolling PLU l1 3＝display PLU l2 4= scrolling PLU 2	Select PLU description display mode

40	Precious Price	Precious Price 0.00	Higher than this price will give a warning message when sell a by weight PLU.
41	IP VALID CHECK	0=NO 1=YES	If Check the last digit of IP address
42	Switch net mode	0=NO 1=YES	As you set get PLU from network server, when the scale can't get PLU scale will change to get from local scale
43	Display negative weight	0=NO 1=YES	If display negative weight
44	Change Language	0=Chinese 1=English 2=France 3=Turkish 4=Polish	Select language
46	PLU NO. Length	0=6 digits 1=8 digits	Select PLU length
48	EAN 13 Style	0=standard 1=special	
49	PP PLU input	0=Normal 1=with [*] key	Select call PLU method in prepack mode
50	PLU Display Font	0=Small font 1=Big font	Select PLU display font size

Label definition

Enter the menu【CODE】【7】【*】,display will show "LABEL DEFINITION", then enter following submenu. Example to set SERVICE BY WEIGHT label:
After press 【CODE】【7】【*】,then press 01【*】, input label number, press 【*】 key confirm.

01SERVICE BY WEIGH
02SERVICE BY COUNT
03PREPACK BY WEIGH
04PREPACK BY COUNT
05TOTAL LABEL
06COPY LABEL
07DELETE LABEL

Password setting

Enter the menu【CODE】【8】【*】,display will show "PASSWORD SETTING", then select following submenu to set.

NO.	MENU	PARAMETER	DESCRIPTION
01	STANDARD CONFIG	MANAGER PASSWORD?	Clear all passwords of the scale. If you have set the ADMINISTRATOR password you should input the manager password first.
02	MANAGER PASSWORD	NEW PSW _ _ _ _	Set the ADMINIDTRATOR password.
03	SCALE PASSWORD	NEW PSW _ _ _ _	Set the power on password of scale.
04	CODE PASSWORD	NEW PSW _ _ _ _	Set the password for entering [CODE] menu.
05	PRICE CHANGE PSW	NEW PSW _ _ _ _	Set the password for changing price.
06	DISCOUNT PSW	NEW PSW _ _ _ _	Set the password for discounting.
07	CLEAR PASSWORD	MANAGER PASSWORD?	Clear each password one by on. If you have set the ADMINISTRATOR password you should input the manager password first.
08	SCREENSAVE PSW	0:NO PASSWORD 1:MANAGER PSW 2:VENDOR PSW	Set the password to exit screensaver.
09	MENU END		

Service function

Enter the menu【CODE】【9】【*】,display will show "SERVICE FUNCTION", then do following operation..

NO.	MENU	PARAMETER	DESCRIPTION
01	FUNCTION TEST		Test the scale display,keyboard etc
02	MEMEORY TEST		Test scale memory
03	INTERFACE TEST		Test scale RS232
04	HIGH RESOLUTION		Display increment X10
05	CALIBRATION		Calibrate the scale
08	PRIMARY CONFIG		Set the scale number
09	TICKET NO. TO 0	0=no 1=yes	Reset the ticket number to zero.
13	FONTS TABLE		Print out fonts table
15	WORK CONFIG	0＝CONFIG NO; 1=CONFIG YES	Reset scale
17	DELETE ALL PLU	0=no 1=yes	
18	DELETE ALL GROUP	0=no 1=yes	
19	DEL. ALL OPERATOR	0=no 1=yes	
21	NETWORK CONFIG		Set IP address of scale
22	SOFTWARE LOAD		Enter update firmware state
24	TICKET PRINTER		Test printer with ticket
25	LABEL PRINTER		Test printer with label
26	CONFIG RS232		
28	HEAD CLEAN ALERT	0=NOT CLEAR 1=CLEAR	0=DISABLE ALERT 1=ENABLE ALERT
29	CHG PAPER MSG	0=ENABLE IN PP. 1=DISABLE IN PP	
32	COMM DEBUG	0=Enable 1=disable	
33	ASSERT DEBUG	0=Enable 1=disable	

34	**CASH DRAW TEST**		**Test the cash drawer**
35	**WIRELESS CONFG**		**If you use wireless scale, please configure the wireless option here**
38	**PRINT MENU LIST**		
41	**CHECK FONT**	START CHAR – END CHAR	**Input the Unicode range of the char you want to check.**

Function test

This function used to test the display, keyboard and printer.

☞⓪① 【✳】 Enter the function, and light on all the display to check if the display is ok.

☞ 【✳】 Display 1234... testing, then scale will print out a ticket to check the printer.
At last which will test the keyboards, you should press the key one by one according to the message.

Memory test

This function used to test scale memory.

☞⓪② 【✳】 Enter the memory test, scale will test it automatically, then print out the test report, also give some information if something is wrong.

Interface test

This function used to test RS232 com part. Before the test you should shorten the PIN 2 and PIN 3 of the COM port.

☞⓪③ 【✳】 Enter the test and scale will give you message in 5 minutes.

After the test, take out shorten wire.

High resolution display

This function used to watch the high resolution of the scale. Use it you can check the

loadcell and A/D pcb.

☞⓪④【✳】	"PUSH CAL BUTTON"	Enter the menu， Display the high resolution. Press key【C】 to exit.
press the calibration button		

Primary configure

This function used to set the scale number.

☞⓪⑧【✳】	**Enter the menu "Primary Config"**
☞ (scale number)【✳】	**Input scale number**

Reset ticket number

This function used to reset ticket number.

☞⓪⑨【✳】	Enter the menu
☞⓪or①	Select if reset it 0：no 1：yes
☞【✳】	

Clear BRAM

This function used to clear all the data in BRAM, including the PLU DATA, SET UP DATA etc.

☞①②【✳】	**Enter the menu**
☞⓪or①	Select the item 0：not clear 1：clear
☞【✳】	

Fonts tabel

This function used to list the fonts table in scale.

☞①③【✳】	Enter the menu and print out the fonts list.

Reset scale as default

This function used to reset the scale as factory default. This will clear all programmed data and reports, but not clear the calibration data.

☞①⑤【✳】 **Enter the menu**
☞⓪or① Select the item
0：not reset
1:reset

☞↑

Usually we should also make sure that we made the right country selection. Go to the country finish menu.

☞【CODE】⑥【✳】⓪①【✳】 **Enter Country Finish menu**
☞⓪①【✳】 Enter Country selection
☞input the Country code e.g. 00: China; 04: Singapore.
☞【✳】Reset default ⓪or①✕ 0: not reset to country default
1: reset to country default

Clear all PLU data

This function used to clear all PLU data in the scale.

☞①⑦【✳】 Enter the menu
☞⓪or① Select item
0：not clear
1：clear

☞【✳】

Clear Group

This function used to clear group in the scale.

☞①⑧【✳】 Enter the menu
☞⓪or① Select item
0：not clear
1：clear

☞【✳】

Clear operator

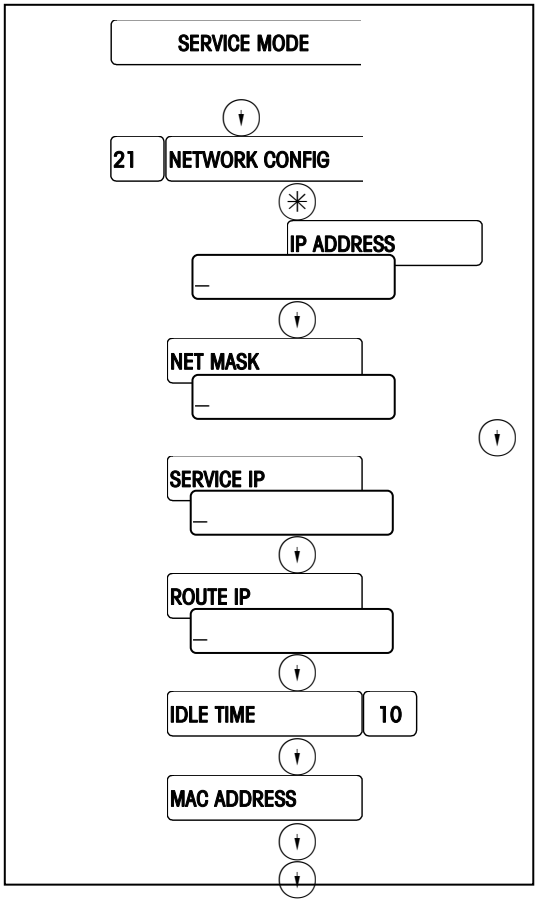
This function used to clear all the operator data of the scale.

☞①⑨【✳】 Enter the menu
☞⓪or① Select item
0：not clear
1：clear

☞【✳】

Network configure

This function used to set IP address, net mask, server IP, and router IP etc.



Enter the preset code 21.

Enter network configure

Input IP address

Input NET MASK address

Input SERVER IP address (If necessary)

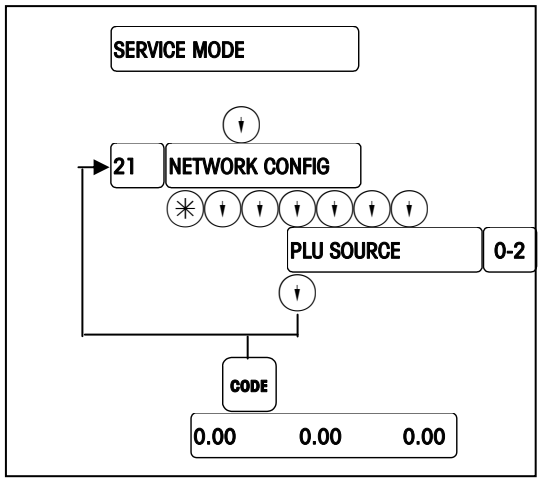
Input ROUTE IP address (If necessary)

Input IDLE TIME (10 is ok)

Scale will restart automatically.

After completing setup, if necessary you can choose the PLU SOURCE. The operation as bellow:

☞ (CODE) (9) (✳) Call the menu "Technical service "



Enter the preset code 21.

0=Get PLU from local scale
1=Get PLU from NETWORK
2=First from network, then from local scale

Press (CODE) to exit.

Ticket print test

This function used to test the printer with ticket.

☞24【*】 Enter the preset code 24.

DISPLAY	DESCRIPTION
RESIST 600-999 850	Select the Ohms Rating marked on the Print Head.
SPEED 105 MM/S 0-5	Select the printer speed: 0=125mm/s; 1=115mm/s; 2=105mm/s; 3=95mm/s; 4=85mm/s; 5=75mm/s
ENERGY -4 -- +4 0	Enter print density (use CNT/WT CHANGE key to input negative value)
PAP.END DET. NO 0-1	Enable paper end detecting (i.e. enable the take label sensor) 0= disable; 1=enable
PRINTERTEST NO 0-1	Conduct printer test (To print out test ticket) 0= No; 1=Yes
SENSORTEST NO 0-1	Conduct gap sensor test 0= No; 1=Yes
PAPER: ⇑ - ⇓ SENSOR OK OK=*	Slowly remove the ticket and insert the ticket again in 10 seconds. The test result will be shown.

Label Printer Test

This function is used to test label printer hardware and adjust printer parameters.

☞25【*】 Enter the preset code 25.

DISPLAY	DESCRIPTION
RESIST 600-999 850	Select the Ohms Rating marked on the Print Head.
SPEED 85 MM/S 0-5	Select the printer speed: 0=125mm/s; 1=115mm/s; 2=105mm/s; 3=95mm/s; 4=85mm/s; 5=75mm/s
ENERGY -4 -- +4 0	Enter print density (use CNT/WT CHANGE key to input negative value)
PAP.END DET. NO 0-1	Enable paper end detecting (i.e. enable the take label sensor) 0= disable; 1=enable
REWIND NO 0-1	Enable rewind feature 0= disable; 1=enable
OFFSET 35	Enter offset length in mm (Eject distance)

TAKEUP THRESHOLD 100	Enter the threshold of take up sensor
PRINTERTEST NO 0-1	Conduct printer test (To print out test ticket) 0= No; 1=Yes
SENSORTEST NO 0-1	Conduct gap sensor and take label sensor test 0= No; 1=Yes
LABEL POS OK=*	Lead the label to the start position manually. The scale will test gap sensor.
LABEL TEAR OK=*	The scale will test take label sensor
SENSOR OK OK=*	The scale will issue two or three labels and show the test results.

Configure RS232

This function is used to set the COM Port parameters.

☞②⑥✳ Enter the menu

☞⓪or①or②or③or④or⑤or⑥ Baud rate
0：300 7:38400
1：600 8:57600
2：1200 9:115200
3：2400
4：4800
5：9600
6：19200

☞↑

☞⓪or① Databits
0：5 digits
1：6 digits
2: 7 digits
3：8 digits

☞↑

☞⓪or①or② parity
0：no
1：odd
2：even

☞↑

☞⓪or① Stop bit
0：1 digit
1：2 digits

☞↑

☞⓪or① 0:Procedure;1:Procedure 7 EIN

☞↑

Reports

Enter the menu【CODE】【2】【*】,display will show "REPORT CONFIG.", then do following operation..

01 RESTORE DEF

【*】 "DEFAULT YES" (press key: 0=YES,1=NO)

【*】

02 SALES REPORT

【*】 "TODAY " (press key:0=today，1=last day，2=total，3=all)

【*】 "SIMPLE RPT" (press key [↓]to select simple or detail report)

【*】 "NOT PRINT" (press key [↓] to select print or not print report)

【*】

03 PLU REPORT

【*】 "TODAY " (press key:0=today，1=last day，2=total，3=all)

【*】 "ALL PLUS" ([↓] to select the PLU range or all plu)
"FROM PLU NO.0" 【*】 "TO PLU NO. 0"（PLU range）

【*】 "SORT BY SUM" ([↓] to sort by PLU or by total)

【*】 "NOT PRINT" (press key [↓] to select print or not print report)

【*】

04 PROMOTE RPT

【*】 "TODAY " (0=today，1=last day，2=total，3=all)

【*】 "NOT PRINT" ((press key [↓] to select print or not print report)

【*】

05 GROUP REPORT

【*】 "TODAY " (0=today，1=last day，2=total，3=all)

【*】 "ALL GROUPS" ([↓] to select GROUP range or all group)

"FROM GROUP NO.0" 【*】 "TO GROUP NO. 0"（GROUP range）

【*】 "SORT BY SUM" ([↓] to sort by PLU or by total）

【*】 "SIMPLE RPT" ([↓] to select detail report or simple report）

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

06 GROUP H REPORT

【*】 "TODAY " (0=today，1=last day，2＝total，3＝all）

【*】 "ALL GROUPS" ([↓] to select GROUP range or all group）

"FROM GROUP NO.0" 【*】 "TO GROUP NO. 0"(GROUP range）

【*】 "SORT BY SUM" ([↓] to sort by PLU or by total）

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

07 HOURLY REPORT

【*】 "TODAY " (0=today，1=last day，2＝total，3＝all）

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

08 SETTLE REPORT

【*】 "SETTLE $ YES" (press key [↓] to select YES or NO)

【*】 "TODAY " (0=today，1=last day，2＝total，3＝all）

【*】 "SIMPLE RPT" ([↓] to select detail report or simple report）

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

10 ST/RETN RPT

【*】 "TODAY " (0=today，1=last day，2＝total，3＝all）

【*】 "PRINT" (press key [↓] to select print or not print report）

【*】

11 VENDOR REPORT

【*】 "TODAY " (0=today，1=last day，2=total，3=all）

【*】 "ALL VENDORS" ([↓] to select VENDOR range or all VENDORs）

"FROM VENDOR NO.0" 【*】 "TO VENDOR NO. 0" （ VENDOR range）

【*】 "SORT BY VEN" ([↓] to sort by VENDOR or by total）

【*】 "SIMPLE RPT" ([↓] to select detail report or simple report）

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

12 CASHDRAW REPORT

【*】 "TODAY " (0=today，1=last day，2=total，3=all）

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

13 WEEKLY REPORT

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

14 MONTHLY REPORT

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

15 YEARLY REPORT

【*】 "NOT PRINT" (press key [↓] to select print or not print report）

【*】

16 COMBINE REPORT

【*】 "202 SALES RPT NO"

【*】 "203 PLU RPT NO"

【*】 "204 PROMOTE RPT NO"

【*】 "205 GROUP RPT NO"
【*】 "206 GROUP H RPT NO"
【*】 "207 HOURLY RPT NO"
【*】 "208 SETTLE RPT NO"
【*】 "210 ST/RETN RPT NO"
【*】 "211 VENDOR RPT NO"
【*】 "212 CASHDRAW RPT NO"
【*】 "213 WEEKLY RPT NO"
【*】 "214 MONTHLY RPT NO"
【*】 "215 YEARLY RPT NO"

【*】 "NOT PRINT" (press key [↓] to select print or not print report)

【*】

18 CLEAR REPORTS

【*】 "DELETE NO" (Press key:0=NO,1=YES)

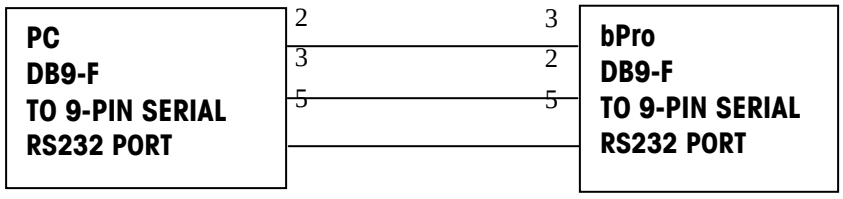
【*】

PC software

PLU records and setup data of the bPro can be programmed through a PC (Personal Computer) using the METTLER TOLEDO program bSoft and bLabel New scales can be easily set up by using this program.

Which requires an IBM or compatible PC with Windows 2000 or higher version operating system. One serial port or Ethernet port is required. The wiring diagrams shown in the following figure can be used to make cables from a 9-pin PC serial port to the 9-pin connector at the bPro. Factory cables are available from METTLER TOLEDO using the part numbers shown in the figure.

123848OTC Cable, PC DB9 to bPro 10ft/3m



Flashing Software

The bPro Operating System Software is retained in Flash EEPROM's on the Main Logic PCB. The EPROM's can be reprogrammed using a PC and a downloader program Hyper terminal. Cables and components are the same as above RS232 cable.
Before downloading the software, turn the bPro power OFF. Connect one end of the cable to the PC's serial port and the other end to the bPro serial port.

Press the 【PRINT】key as power on the scale.
The scale will display "WAIT FOR HOST……" to wati for PC signal.

Then enter the Hyper terminal, to select right COMM port of the computer.
Then set the data as "baud tare 115200, data bits 8, parity none, stop bits 1,flow control none"
After come back main interface of the Hyper terminal, to select " send file" ,select the scale code and the protocol as "1K Xmodem". Send the file to scale.

The PC screen will display a status menu to show the flashing progress. When the flashing is completed, the scale will reset automatically. Press any key to exit Hyper terminal program at the PC.

Also you can use a kit made of Mettler-Toledo which can update the firmware via Ethernet. First connect the Ethernet cable from scale's RJ45 to computer.
If you use Ethernet to update, hold the [00] key to power on scale, before it you should set the scale's IP address.

Also you should make some setting in PC kit, that will be introduced in software.

4 Troubleshooting

Troubleshooting Guide

Following is a list of symptoms that could occur, and the recommended action to correct the problem.

SCALE INOPERATIVE/BLANK DISPLAYS

1. Check AC power at outlet.
2. Check Voltage on Main Logic PCB. If voltages are zero, check Power Supply.
3. If test point voltage is good replace Main Logic PCB.
4. Check Display Cable on Main Logic PCB and Operator Display PCB. Check Display PCB.

KEYBOARD INOPERATIVE

1. Check keyboard connection on keyboard controller PCB.
2. Check Keyboard controller connection to Main Logic, ensure all connections are secure.
3. If all connections are secure and keyboard is inoperative:

a) Replace keyboard controller PCB.
b) Check keyboard once again.
c) If Keyboard is still inoperative, replace keyboard.

SCALE WON'T ZERO (DISPLAY "PUT PLATTER ON" or "ZERO NOT CAPTURE")

1. Check platter and spider for obstructions. Turn power off, then back on.
2. Recalibrate.
3. Check Load Cell supply voltage.
4. Replace Load Cell.

LOSING PROGRAMMED DATA

1. Check Error Report of Service Mode.
2. Check Main Logic voltage at test points.
3. Replace Main Logic PCB.

PRINTER WON'T DELIVER LABEL

1. Check printer for obstructions.
2. Check if there is a label which has not been removed.
3. Check Take Label sensor obstructions.
4. Clean Take Label sensor.
5. Test Take label sensor with SENSOR TEST in Service Mode.
6. Check harness from Printer to Main PCB.
7. Check label stepper motor.
8. Replace Main Logic PCB.

INCORRECTLY INDEXES LABELS

1. Check label installation.
2. Check label format and label size.
3. Clean Gap Sensor Lens.

4. Check and clean platen roller, stripper bar, and delivery path using MT cleaning pen.
5. Adjust label Gap Sensor through SENSOR TEST in Service Mode.
6. Replace Gap Sensor Assembly.
7. Replace Main Logic PCB.

LABELS DARK

1. If labels are printed correctly, but are excessively dark, check the ENERGY setting in Service Mode.
2. Check printhead harnesses for loose wires.

LABELS MISSING DOTS

1. If the labels are streaked by lines from top to bottom, replace the Printhead.
2. If characters are cut off, check label format programming. If OK, replace printhead.

LABELS ARE EXCESSIVELY LIGHT/DARK

1. Check Print SPEED and ENERGY setting in Service Mode.
2. Check with other known good label stock.
3. If light print, check and clean printhead resistor line and platen roller.
4. Check printhead harness for loose wires.
5. Check Main Logic PCB voltages. If OK, replace Printhead.

LABEL PRINT IS MOTTLED WITH LIGHT SPOTS

1. Check with other known good label stock.
2. Check and clean printhead resistor line and platen.
3. Replace printhead.

LABELS NOT STRIPPING CORRECTLY

1. Check with other known good label stock, e.g. Nashua.
2. Check label format programming.
3. Check rewind spool for wear.
4. Check Gap Sensor and Take Label Sensor with SENSOR TEST in Service Mode.

LABELS PRINTED EVEN IF ONE IS NOT YET TAKEN

1. Check PAP. END DET. option in Service Mode (Paper End Detection)
2. Check Take Label Sensor.
3. Check Main Logic PCB.

OUT OF LABELS ERROR

1. Make sure labels are threaded through the Gap Sensor.
2. Clean/Check Gap Sensor.
3. Check Gap Sensor through SENSOR TEST in Service mode.
4. Replace Gap Sensor.
5. Replace Main Logic PCB.

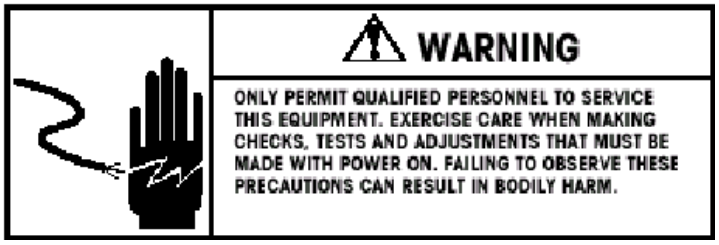
CAN'T COMMUNICATE WITH PC

1. Test scale serial port through INTERFACE TEST in Service Mode.
2. Check the connection cable.
3. Check which serial port is used at PC.
4. If using bSoft, check the COM PORT SETUP and set to the following parameters:

   Bit per second: 9600
   Data bits: 8
   Parity: None
   Stop bits: 1

POWER SUPPLY

Following is a list of symptoms that could occur, and the recommended action to correct the problem.

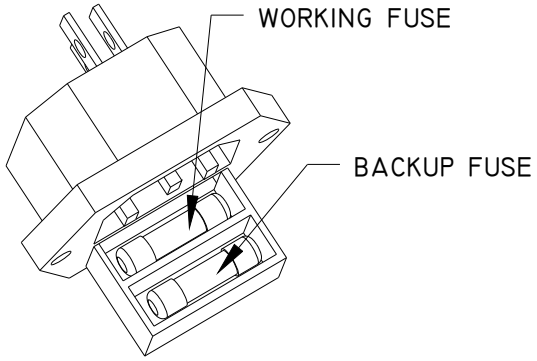

WARNING
ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

Place the Power Switch to the OFF position. Remove the platter, spider, and top cove. To check the +24VDC output voltage from the Power Supply terminal between the terminals marked +V and GND, the acceptable output range is +24VDC +/-0.50 VDC.

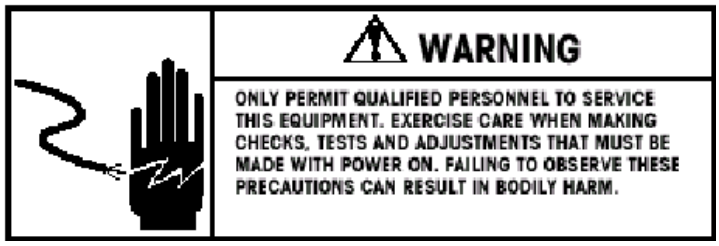
If the voltage is normal, the Power Supply should be good, and the problem should be suspected as being in the Main Logic PCB or a component that connects to the Main Logic PCB.

If the output voltage is zero, check the 120 VAC input voltage. If the correct AC input voltage is present, but there is no +24 VDC output, replace the Power Supply.

If no voltage is present, check the fuse (240VAC 4A) on the power supply. If the fuse is OK, check AC input at the Line Cord Jack between the Red wire and Black wire. If the 120VAC is present, suspect a defective power switch. If 120 VAC is not present at the jack, check the fuse (240VAC 3A) installed in the Line Cord Jack, as shown in the following Figure. If the fuse is OK, verify voltage is present at the AC wall outlet.



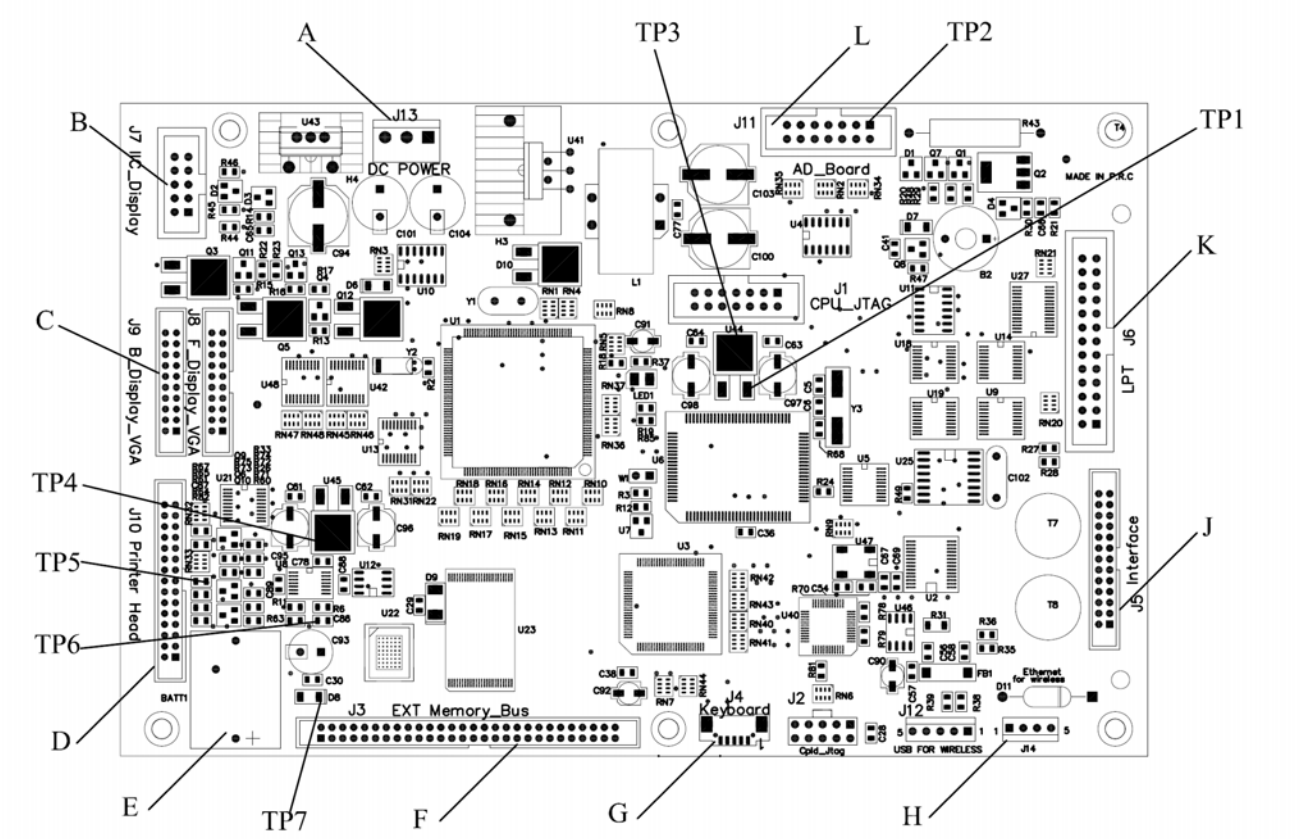
Main Logic PCB


WARNING
ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

The Main Logic PCB receives +24VDC from the Power Supply and uses this to supply +10VDC and +5VDC to other components. The Main Logic PCB controls all functions in the unit including the thermal printer. Inputs and Outputs to the Main Logic include the Label Taken Sensor, Gap Sensor, Printhead, Stepper Motor, Rewind Motor, Load Cell and etc. The following Figure shows the locations of the various components and connectors on the Main Logic PCB.

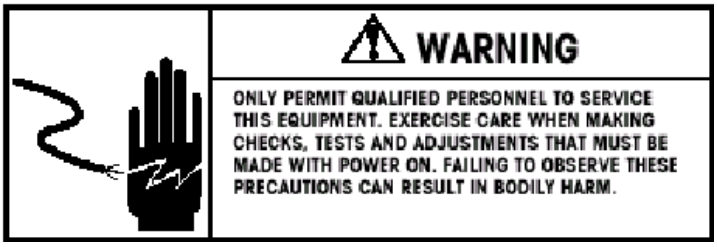
If the volages are not within the range specified, and the Power Supply voltage is correct, replace the Main Logic PCB.

NOTE: WHEN REPLACING THE MAIN LOGIC PCB, THE UNIT MUST BE REFLASHED.



Ref	Description	Ref	Description
A	J13，+24VDC Supply	TP1	U44, +5V test point
B	J7, IIC Display connector	TP2	J11, +12V test point
C	J8J9, VGA Display connector	TP3	U44, +3.3V test point
D	J10, Printerhead connector	TP4	U45, +2.5V test point
E	Battery	TP5	C87, Take up sensor test point
F	J3, Exttended Bus connector	TP6	C86, Gap sensor test point
G	J4, Keyboard connector	TP7	D8, SRAM Battery Supply test point
H	J14, Wireless Module +5V Supply		
J	J5, User Interface		
K	J6, ECP parallel Port		
L	J11, AD Module connector		

Load Cell


WARNING
ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

The Load Cell can be tested for proper analog voltage input and millivolt output by measuring the voltage on the Main Logic PCB. To check the input voltage across +EXC & -EXC, place your meter on volts and put the positive lead on the left pin of F1 and the negative lead on the left pin of F4. You should be reading a steady +10VDC +/- 0.25VDC.

If the Excitation voltage is good, the signal output can be checked across +SIG & -SIG. Set the meter to read in millivolts (mV). Put the positive lead on the left pin of F2 and negative lead on the left pin of F3. With no weight on the platter, you should read zero data. As you add weight to the platter, the voltage should rise and be linear if equal weight is added each time. If the output is linear and correct, but no weight is displayed, replace the Main Logic PCB. If there is no output from the load cell, but correct input voltage, replace the load cell.

Warning Message

INPUT TOO BIG
The input is too big.

INPUT TOO SMALL
The input is too small.

TOO MUCH INPUT
The input is out of limit.

WRONG CODENR.
The code number is invalid.

KEY NO FUNCTION
The key has no function.

KEY BLOCKED
The key is disabled. Check the KEYBOARD CONFIGURE.

PLU NOT FOUND
The entered PLU number does not exist.

AG NOT FOUND

The entered Group number does not exist.

OPER.NOT FOUND
The entered Operator number does not exist.

LABEL NOT FOUND
The entered Label Format does not exist.

PLUNR IS OCCUP
You are trying to duplicate a PLU into an exist PLU number.

LABELNR. OCCUP
You are trying to duplicate a label format into an exist label format number.

AG NOT DELETABLE
This Group contains total data and can not be deleted.

OP NOT DELETABLE
This Operator contains total data and can not be deleted.

MEMORY FULL
Memory is full.

WEIGH AGAIN
You are trying to record one item twice. Remove the item from the platter and put a new item on the platter.

WRONG LABEL
The installed label roll does not match the configured label format.

LABEL MOVED
The stepper motor or the rewind motor is not working properly.

CHANGE PAPERROLL
The label roll is not installed or the label roll is empty.

TAKE LABEL OFF
Take off the current label before printing the next one.

NO FREE OX KEY
All the configured operator keys have been occupied.

PRINT TICKET
Print out the customer ticket before logging out.

OPEN CUST. TICK
You are trying to delete an operator who has total data.

OX NOT LOGGED-IN
The operator has not be assigned to an operator.

PAYMENT TOO LOW
The payment is less than the total amount.

NO FURTHER REG.

No further transaction has been recorded.

DISCOUNT IMPOSS
This PLU does not allow to be discounted. Check the PLU Discount configuration, or this PLU is in special offer.

TARE TOO BIG
The entered tare is too big.

PLU TARE ACTIVE
You are forbidden to override the PLU tare.

NO STABLE WEIGHT
The weight is not stable.

PUT PLATTER ON
The weight is too small and out of power up zero range.

ZERO NOT CAPTURE
The weight is too big and out of power up zero range.

WEIGHT TOO SMALL
The weight is too small to be printed.

ERROR TAKE-SENS
The take label sensor is not working properly.

ERROR POS_SENS
The gap sensor is not working properly.

ERROR INTERFACE
The serial port is not working properly.

Error Message

Listed below are the possible error codes. When an error code appears, the scale should be switched off and on. In many cases the error will disappear.
There are 3 different kinds of error messages:
Error Status 1:
Warning! After the warning the scale can still be used.
Error Status 2:
Press "CODE" key. Change to one of the CODE menu. Back to normal operation mode.
Error Status 3:
Press "CODE" key and enter SERVICE MODE, after returning to normal operation mode the scale will perform RESET.

Error Message	Reason	Status	Action
ERROR 300 PRINTER	Printer driver defect	2	Replace Main Logic PCB
ERROR 301 PRINTER	Printer driver defect	2	1 Reflash the software 2 Replace Main Logic PCB
ERROR 307 PRINTER	Printhead defect	2	1 Replace printhead 2 Replace printhead harness 3 Replace Main Logic PCB
ERROR 308 PRINTER	Printer driver defect	1	Replace Main Logic PCB
ERROR 310 PRINTER	Printer driver defect	2	Replace Main Logic PCB
ERROR 101 AP	Real Time Clock defect	1	Replace Main Logic PCB
ERROR 400 CELL	Load Cell defect	-	1 Replace Main Logic PCB 2 Replace Load Cell
ERROR 401 CELL	Load Cell defect	-	1 Recalibrate 2 Replace Main Logic PCB 3 Replace Load Cell
ERROR 200 DATABASE	Data bank error	3	Reset RAM
ERROR 201 XX DATABASE	XX Data error	2	1 Reset RAM 2 Delete Data XX
ERROR 202 XX DATABASE	XX Data error	2	1 Reset RAM 2 Delete Data XX
ERROR 203 YY DATABASE	YY Data error	2	1 Reset RAM 2 Configure YY
ERROR 205 DATABASE	Data bank error	3	Reset RAM

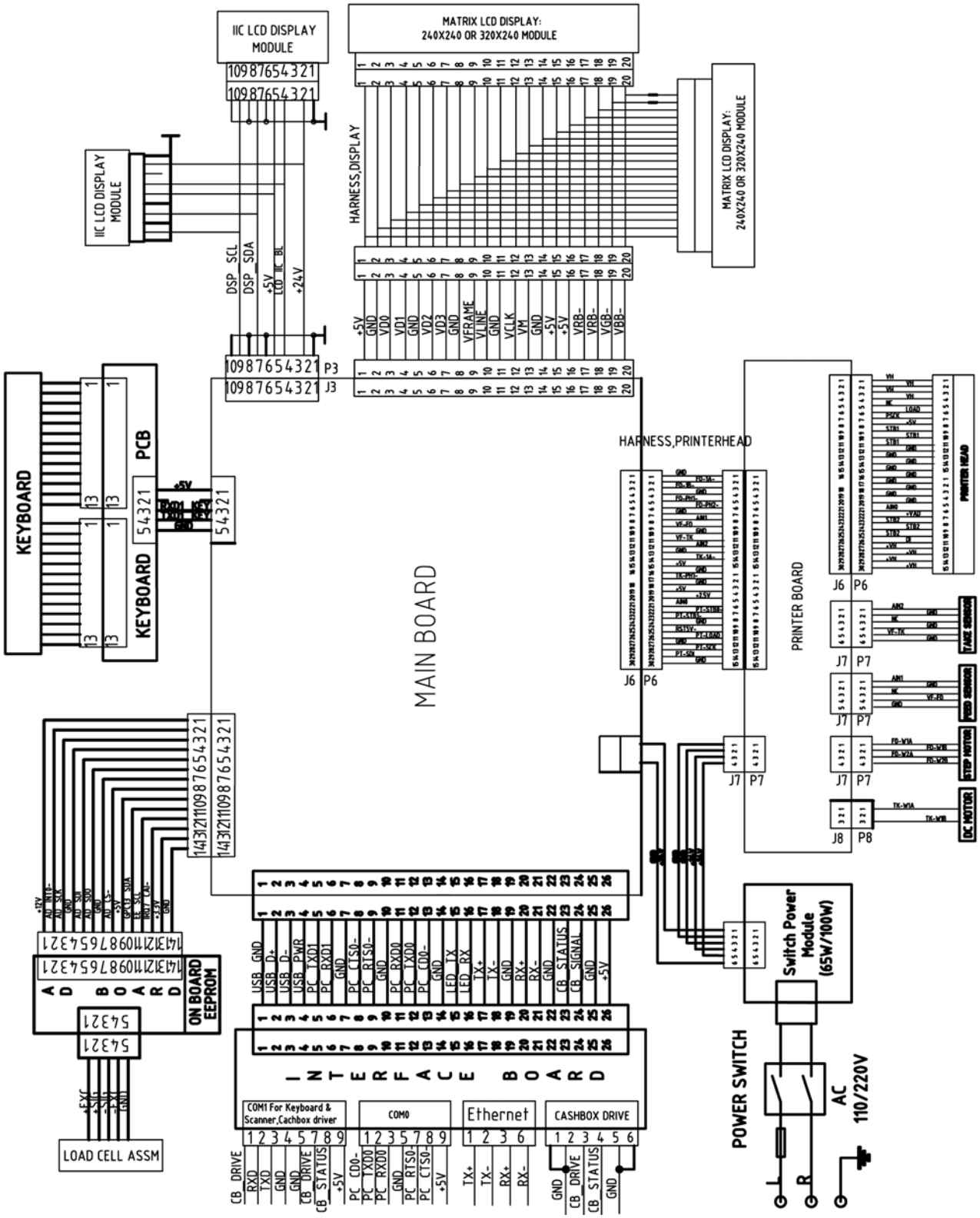
Meaning of XX

01 Operator
02 Ticket data
03 Time total data
04 Text data
05 Barcode data
06 Tare data
07 Group data
13 Label data
15 Date text data
21 PLU label data
23 Store adress
24 PLU data

Meaning of YY

01 Operator Configure
03 Keyboard Configure
04 Password Configure

Interconnecting Diagram



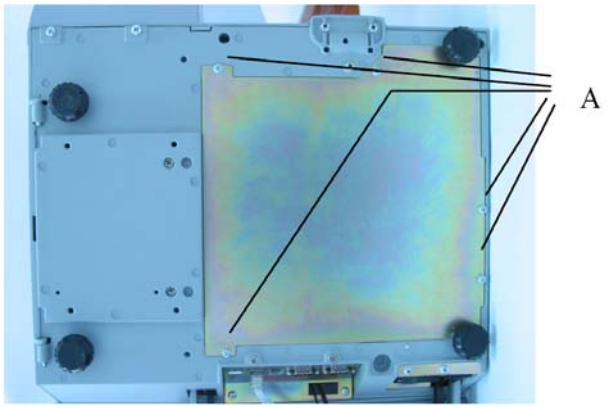
5 Parts Replacement

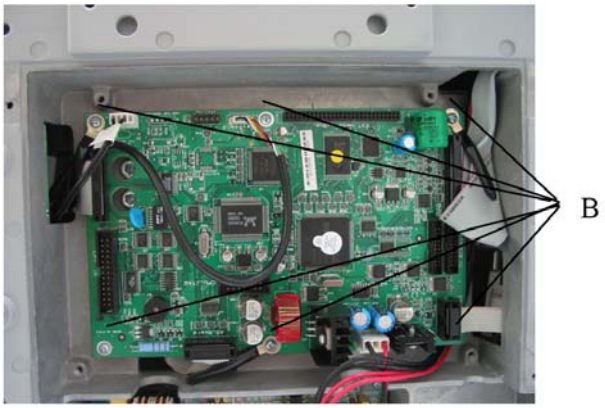
Replace main PCB

WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

! all the data saved in main PCB, as you change the main PCB you will lose all of them.

Counter type





• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Screw out the 5 bolts (A) from base and take away.

• Show main PCB.

• Pull out all connection from main PCB.

• Screw out 6 bolts (B) from main PCB, take away it.

Install main PCB

• Put the main PCB to right position, screw in 6 bolts of main PCB.

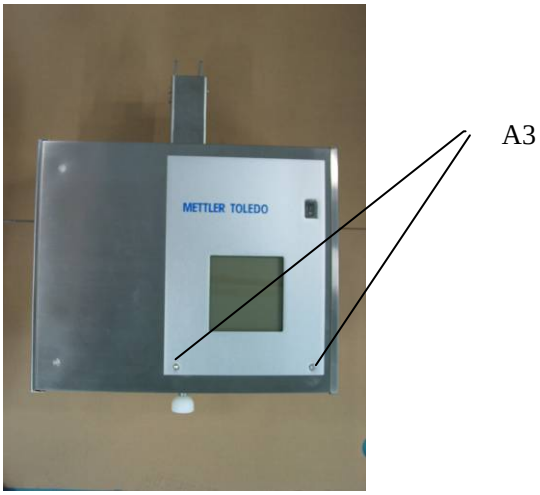
• Put the cover of base then screw in 5 bolts.

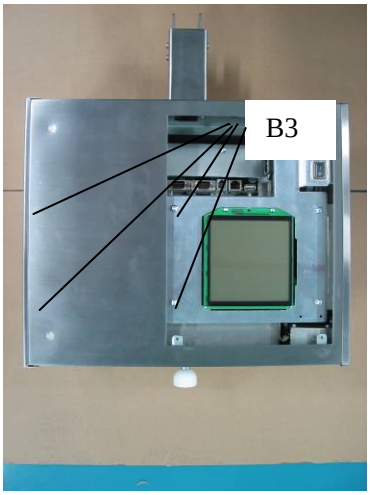
• Put on platter.

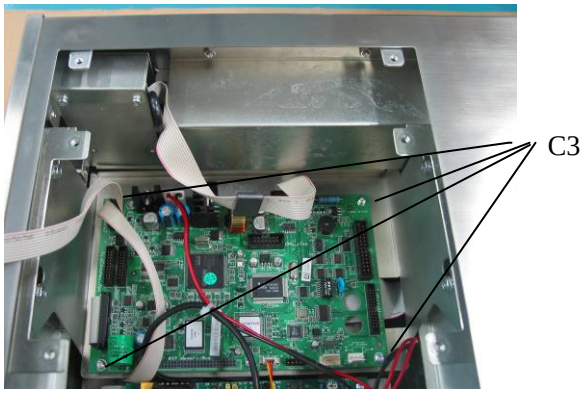
• Power on scale.

Hanging type:

bPro -H2







Take out main PCB

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Screw out the 2 bolts (A3) from scale and take away.

• Screw out 4 bolts (B3) from scale and show main PCB.

• Pull out all connection from main PCB.

• Screw out 4 bolts (C3) from main PCB, take away it.

Install main PCB

• Put the main PCB to right position, screw in 4 bolts of main PCB.

• Connect all harness to main PCB.

• Put the display and power support kit to position, screw in 4 bolts.

• Put the cover of display then screw in 2 bolts.

• Install whole hanging scale.

• Put on platter.

• Power on scale.

Replace switch power

WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

Counter type:

Take out switch power

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Screw out the 5 bolts (A) from base and take away.

• Pull out the harness in switch power.

• Screw out 4 bolts in the power PCB.

• Take away the switch power.

Install switch power

• Put the switch power to the right position.

• Screw in 4 bolts of the power PCB.

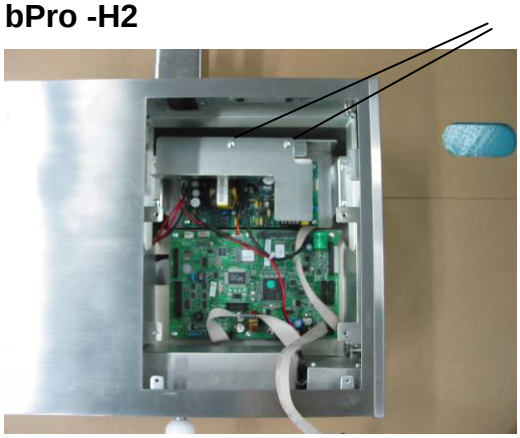
• Plug in all the connection harness in the PCB.

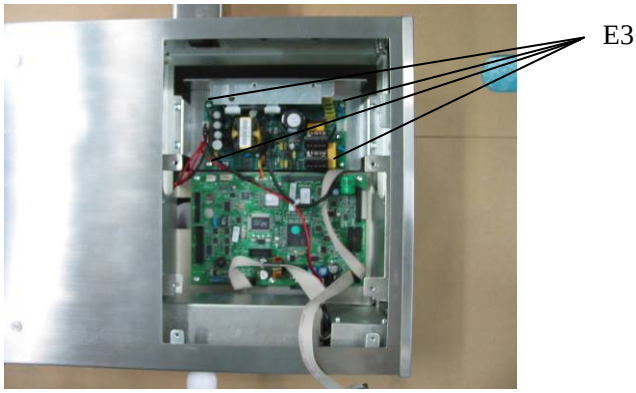
• Put the cover of base then screw in 5 bolts.

• Put on platter.

• Power on scale.Hanging type:

bPro -H2





Take out switch power

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Take away the back display cover and back display kit as before.

• Screw out the 2 bolts (D3) from base and take away.

• Show the switch power.

• Pull out the harness in switch power.

• Screw out 4 bolts (E3) in the power PCB.

• Take away the switch power.

Install switch power

• Put the switch power to the right position.

• Screw in 4 bolts of the power PCB.

• Plug in all the connection harness in the PCB.

• Put the support plate then screw in 2 bolts.

• Install back display kit.

• Install whole hanging scale.

• Put on platter.

• Power on scale.

Replace display

WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

Counter type

Take out display

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Take away the tower kits.

• Screw out 2 bolts in the display cover, and take out the front cover, show the display.

• Screw 5 bolts of the front display, pull out harness and take away the display.

• Screw 4 bolts of back display and pull out harness, take away back display.

Install display

• Put the back display to right position and screw in 4 bolts to fix it.

• Plug in harness of display.

• Also the harness to front display.

• Put on the front display.

• Screw in bolts for installation.

• Put the front display.

• Screw in 2 fix bolts of cover.

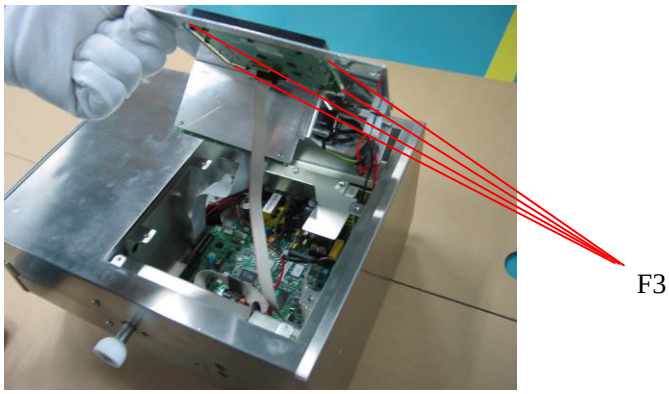
• Install the tower to base.

• Put on platter.

• Power on scale.

Hanging type:

bPro -H2



Take out display

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Take out back display kit as previous method.

• Take away display harness in display.

• Screw out 4 bolts (F3) in the display support plate, and take out the back display.

• For front display, you should also take away the main PCB and power PCB, then to show the front display, screw out 4 installation bolts.

Install display

• Put the back display to right position and screw in 4 bolts to fix it.

• Plug in harness of display.

• Install the back display kit.

• Install back display cover.

• Install whole hanging scale.

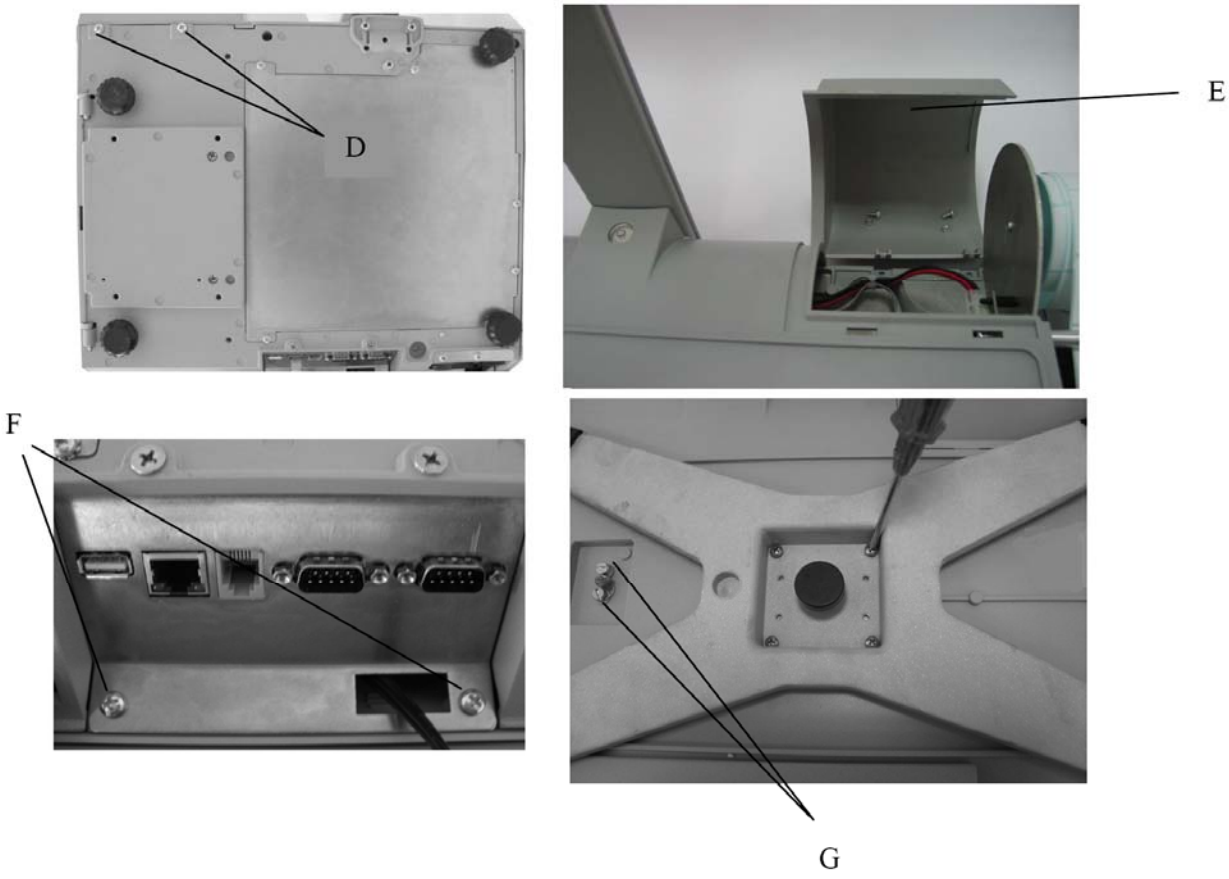
• Put on platter.

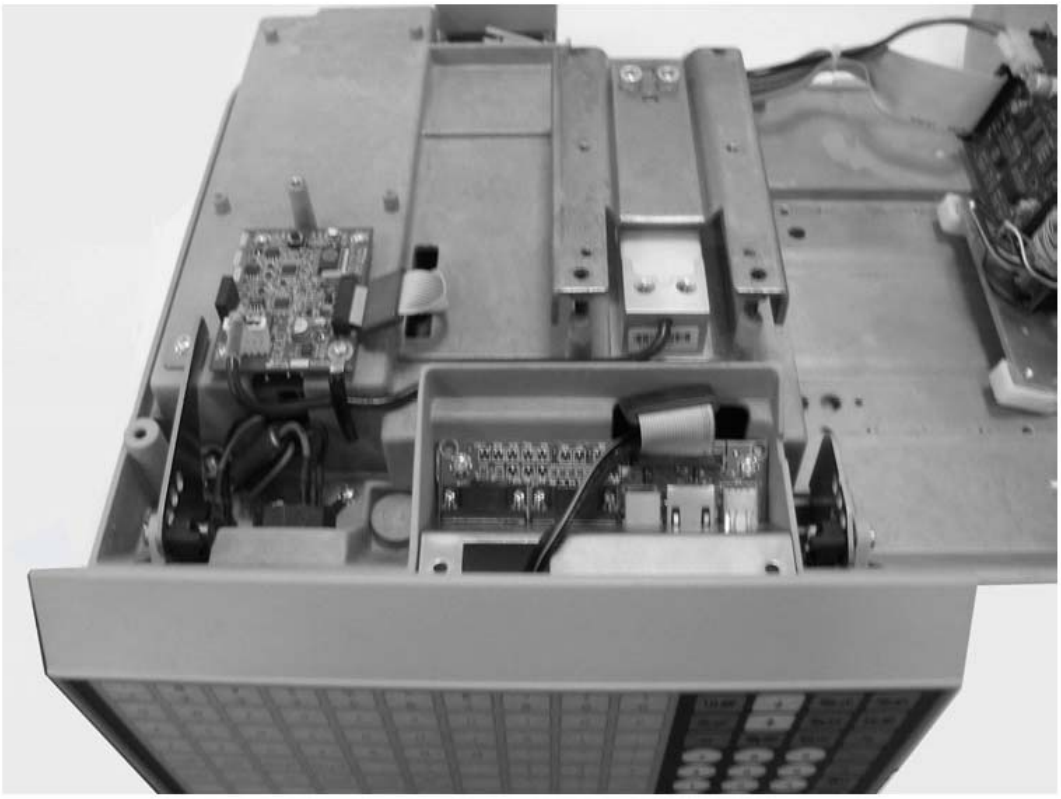
• Power on scale.

Replace load cell

WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

Counter type





Take out loadcell

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Screw out 2 bolts for fix the cover of print paper (D).

• Take out the cover (E).

• Screw out 2 bolts in interface PCB (F).

• Screw out 4 bolts in up spider, and take out it.

• Open the sealing screw (G).

• Take away up cover.

• Pull out loadcell harness from main PCB.（see above to find the main PCB）

- Screw 2 screws in loadcell and take out spacer.
- Also take out loadcell spacer.
- Also screw 2 screws for installing loadcell under the scale.
- Take away loadcell.

Install loadcell

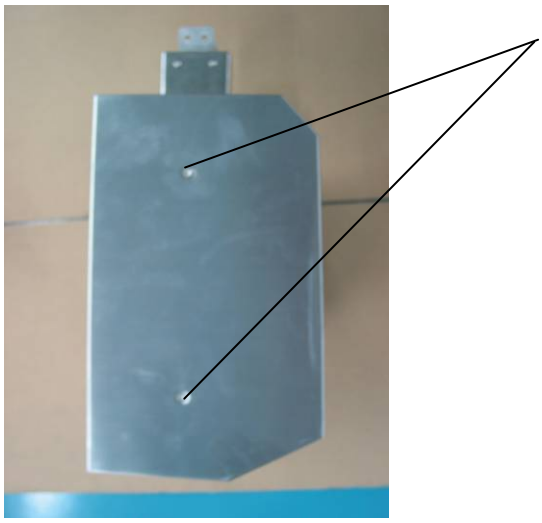
- Put the loadcell to right position.
- Install 2 screws from scale bottom.

- Screw down with moment spanner.15kg CAPACITY with 8 NM,
  30kg CAPACITY with 10 NM.
- Put the spacer and then screw down 2 screws in it.
- Screw down with moment spanner.15kg CAPACITY with 8 NM,
  30kg CAPACITY with 10 NM.
- With X mm ruler to adjust the limit size of back 2 screws. With Y mm ruler to adjust the limit size of front 2 screws inspacer.(capacity:6/15kg X=1.2mmY=0.9mm；capacity:15/30kg X=1.9mmY=1.3mm)
- Insert the loadcell harness to main PCB.
- Install the up cover, print paper cover,up spacer,screws in interface PCB, cover of main PCB at bottom etc.
- Adjust 4 screws in up spacer and let the spacer levelly.
- Put on platter.
- Power on scale.

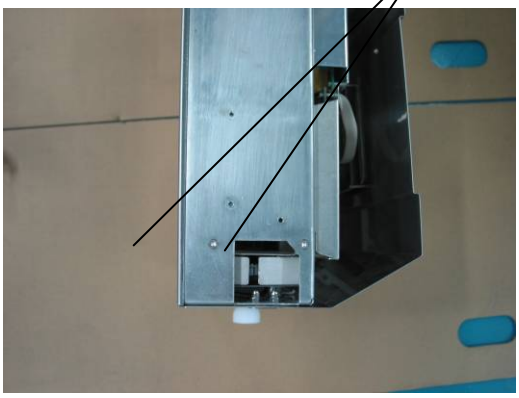
Hanging type:

G3

bPro-H2

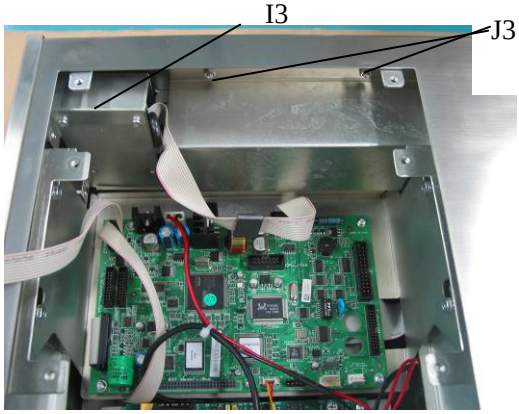


H3



I3

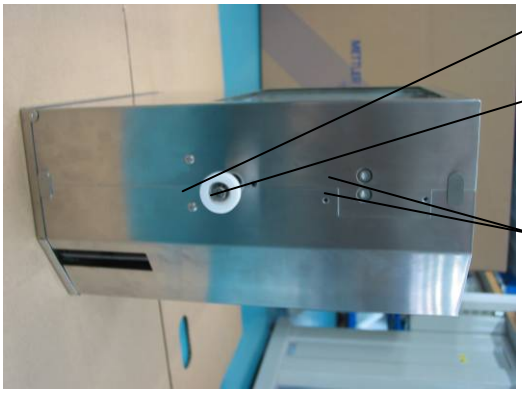
J3



K3

L3

M3



Take out loadcell

• Power off and take out the power cable from electrical outlet.
• Take away platter.
• Screw out 2 bolts (G3) for fix the left cover.
• Take out the cover.
• Screw out 2 bolts (H3) in base.
• Take away A/D convertor kit (I3).
• Screw out 2 bolts (J3),take out the cover.
• Screw out bolt (K3) and bolt (L3) for connecting load cell.
• Screw out 2 bolts (M3).
• Take out loadcell.

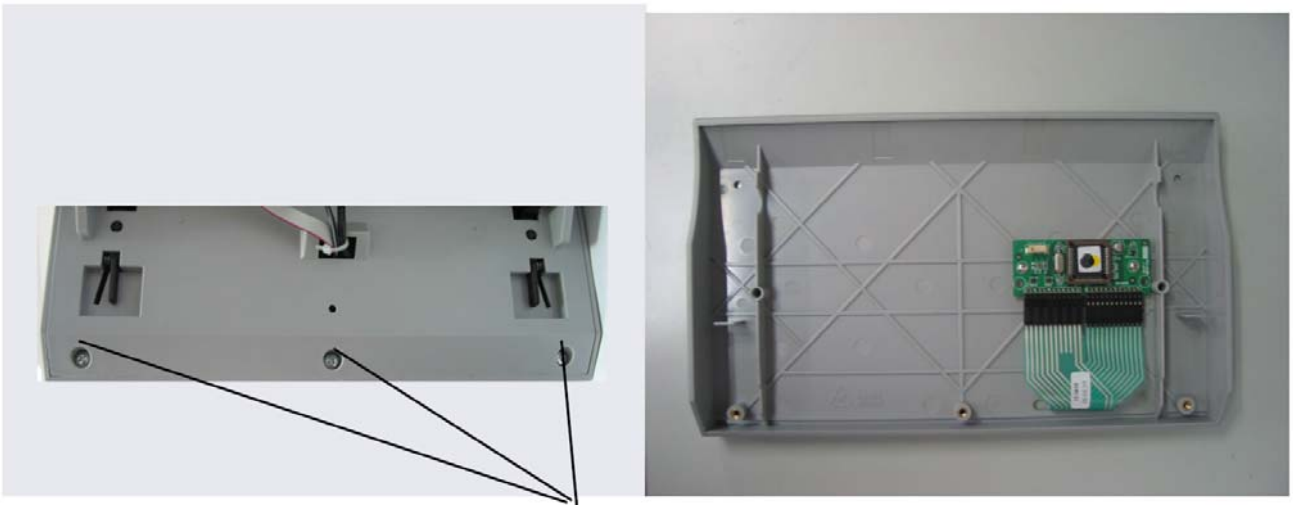
Install loadcell

• Put the loadcell to right position.
• Use reverse steps to install the load cell as previous take out steps.

Replace keyboard

WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

Counter type



Take out keyboard

H

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Screw out 3 bolts (H) in keyboard at bottom.

• Take out keyboard and cover kits.

• Pull out the harness of keyboard from the keyboard convert PCB.

• Rip off the keyboard overlay, take out it.

Install keyboard

• Clean the keyboard cover with alcohol, and wait it till dry.

• Let harness through the hole in it and rip off the protect paper in keyboard, then stick it to the keyboard cover.

• Plug in the harness to keyboard convert PCB.

• Put the keyboard to right position and install 3 bolts in it.

• Put on platter.

• Power on scale.

Hanging type:

bPro-H2

Just use new one replace old one and hang it.

Replace printer

WARNING
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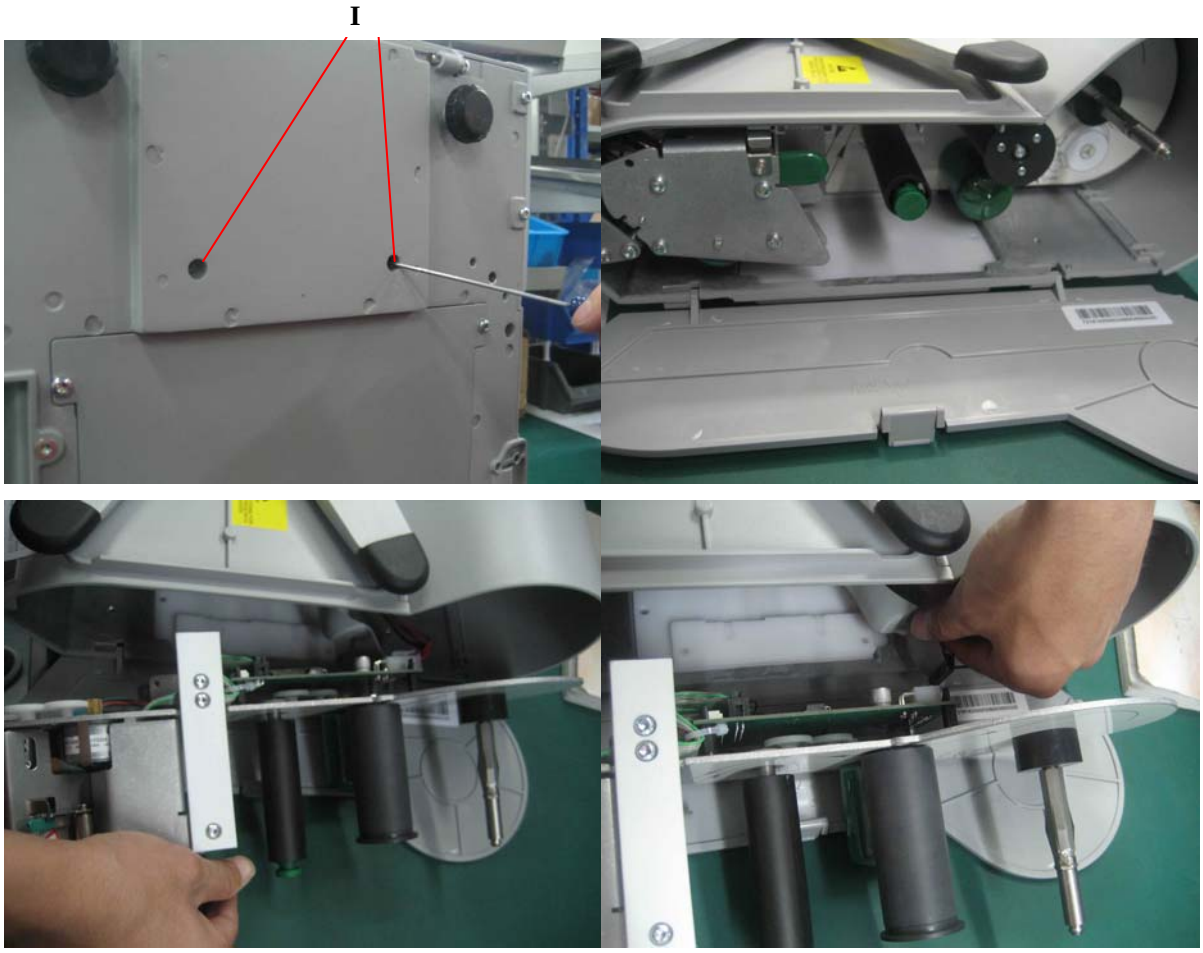
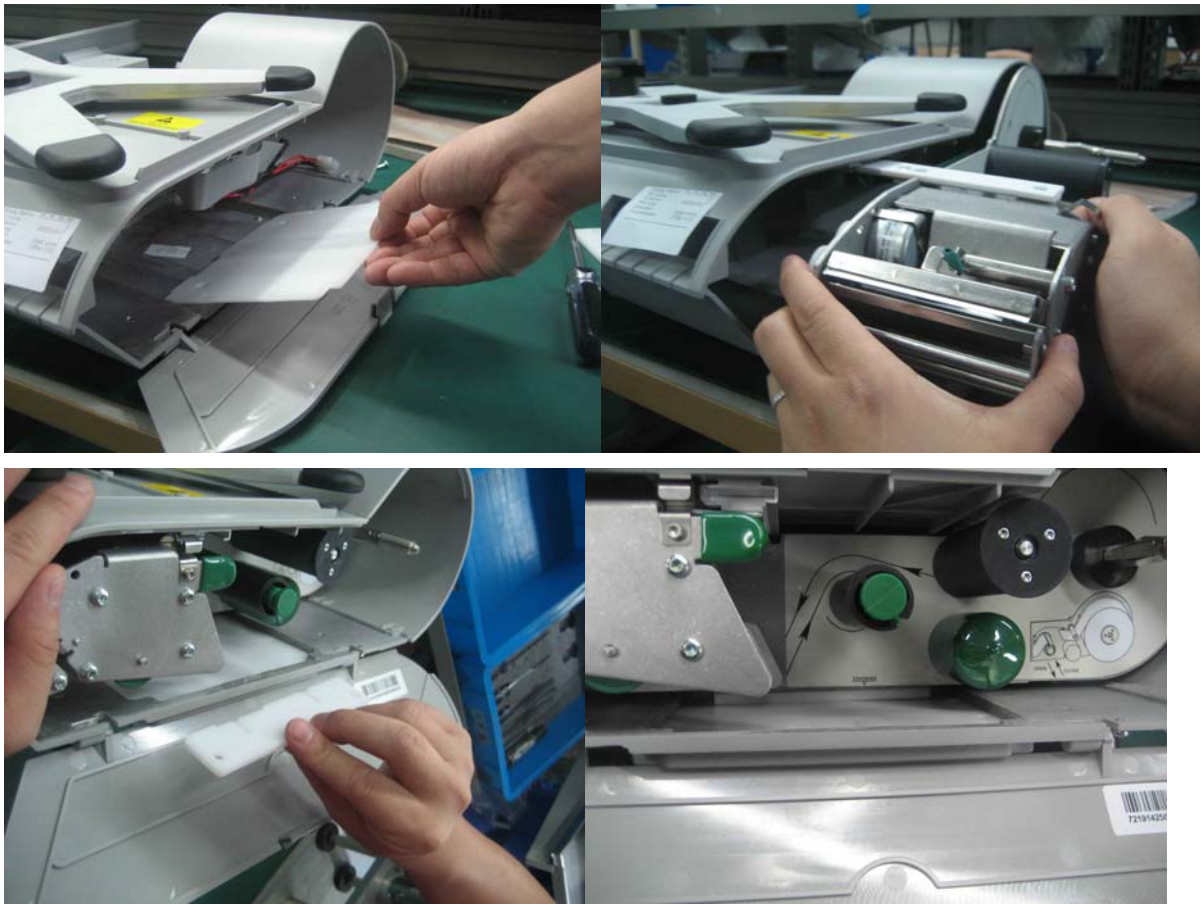
Counter type





Take out printer

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Screw out 2 bolts (I) at the bottom of the scale.

• Open the printer door.

• Pull out printer, also disconnect the harness in printer PCB and connect ground wire.

• Take out printer, also with sliding feet under it.

Install printer

• Put the sliding base to right position.

• Insert the harness of the printer PCB and connect the ground wire.

• Put the printer to right position and insert to scale carefully.

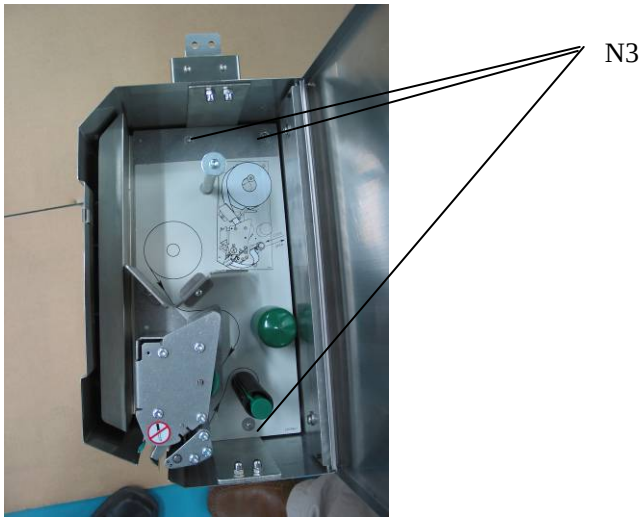
• Insert the sliding feet under the printer. Screw down 2 bolts for fixing the printer at bottom of scale.

• Close printer door.

• Put on platter.

• Power on scale.

Hanging type:



bPro-H2
Take out printer

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Open right door of scale.

• Screw out 3 bolts (N3) at the bottom of the printer.

• Take out all harness in printer PCB.

• Take out printer.

Install printer

• Insert the harness of the printer PCB.

• Put the printer to right position and insert to scale carefully.

• Screw down 3 bolts for fixing the printer.

• Close printer door.

• Install whole hanging scale.

• Put on platter.

• Power on scale.

Replace printer head

WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

⚠ DON’T GRIDE THE PRINTER HEAD.

Take out printer head.

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Open printer door, pull out printer.

• Screw out 2 screws (J) for fixing printer head.

• Pull out the harness from printer head.

• Take away printer head.

Install printer head

• Insert the printer head harness.

• Put the printer head and spacer to right position. Screw down 2 bolts.

• Close the printer head.

• Push the printer back to scale.

• Put on platter.

• Power on scale.

Install Wireless card

WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

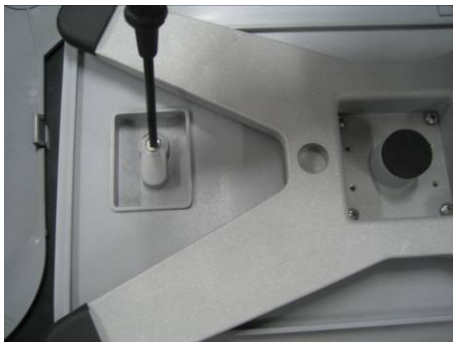
Counter type

! Steps as below. (counter type as example)

(A1)

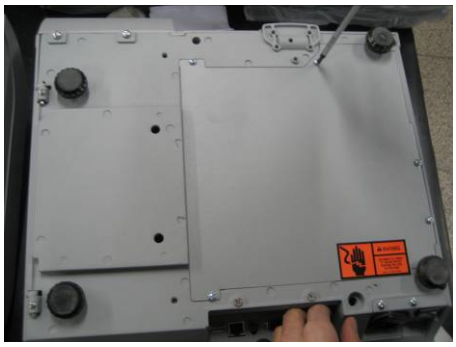
(B1)

(C1)

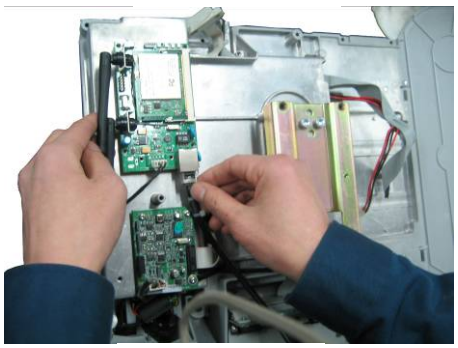


(D1)

(E1)

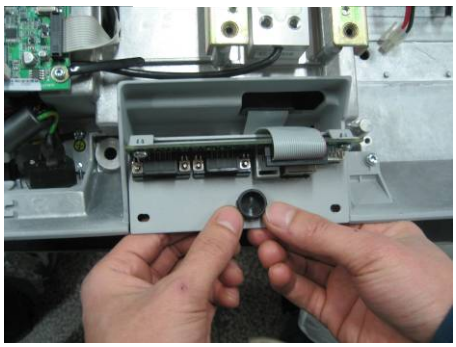


(F1)

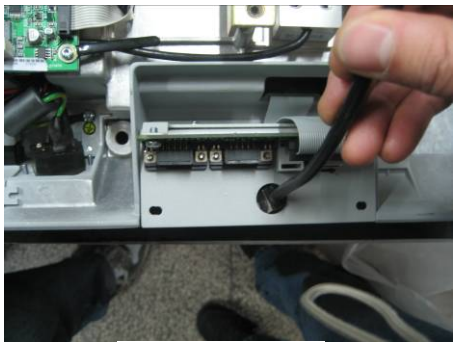


(G1)

(H1)

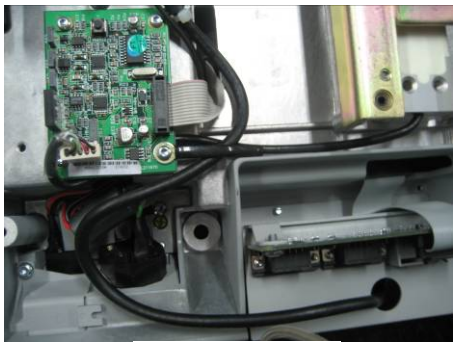


(I1)

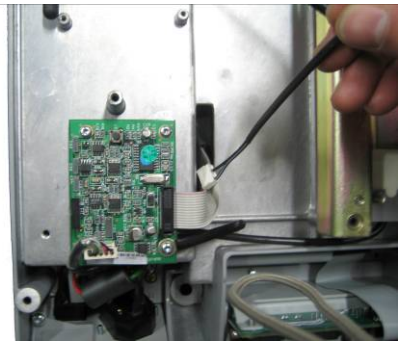


(J1)

(K1)



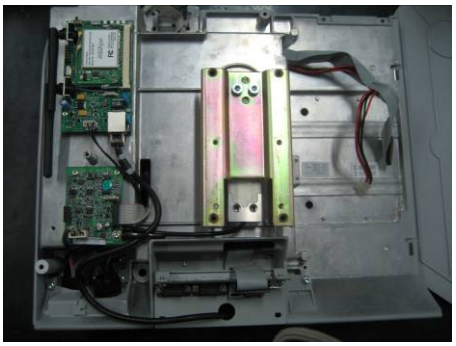
(L1)



(M1)

(N1)

(O1)



(P1)

• Power off and take out the power cable from electrical outlet.

• Take away platter.

• Screw out bolts from up spider (C1) and screw out sealing bolts (D1).

• Take apart the main PCB cover in bottom (F1), also take apart the cover of scale as screw out the bolts in the bottom of scale.

• Put the wireless kit (A1) to the position (G1).
• Install the bolts to it (H1).
• Take out the seal from hole (I1).
• Put the Ethernet harness through the hole (J1).
• Connect the Ethernet harness to the Ethernet port (K) and fix the harness as picture (L1).
• Put the wireless card power harness through the hole (M1).
• Connect the wireless card power harness to the main PCB (O1).
• Then to install the scale cover, the up spider, the main PCB cover in bottom, seal switch bolts etc.

Install the memory extension board

WARNING
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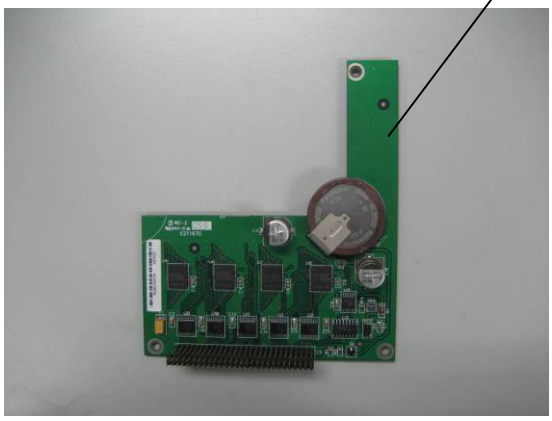
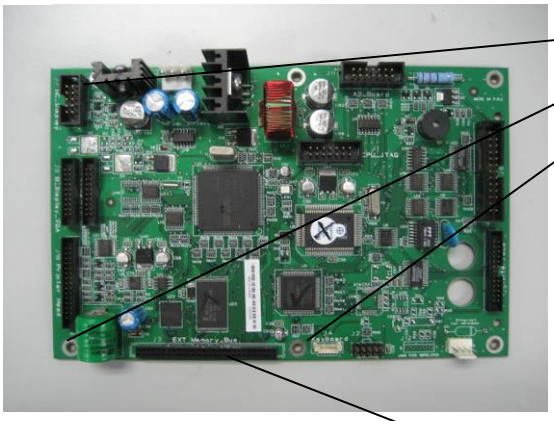
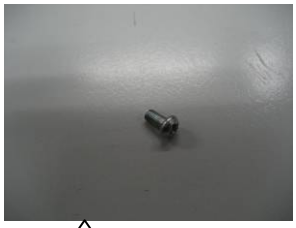
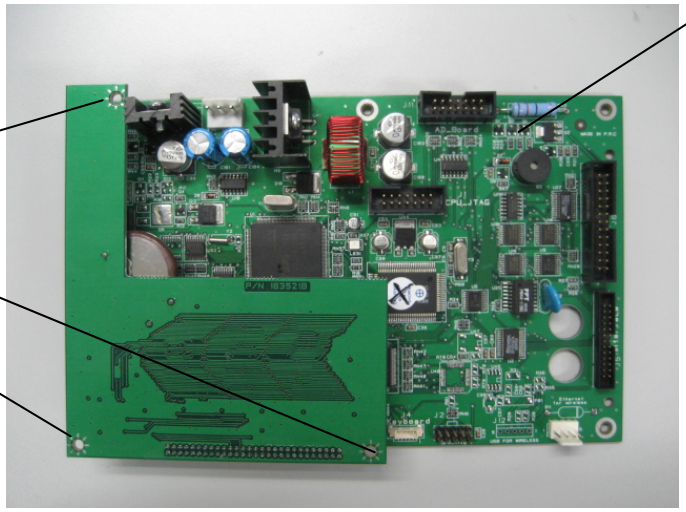
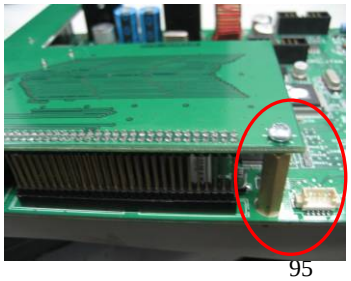










Install the memory extension board.

• Power off and take out the power cable from electrical outlet.
• Take away platter.
• Screw out bolts from up spider and screw out sealing bolts in scale.
• Get the memory extension board (A2)
• Find socket of extension memory in main PCB (B2).
• Install bolts (C2) to main PCB.
• Insert the memory extension board to it as (E2).
• Fix three install bolts (D2) to main PCB.
• Then to install the scale cover, the up spider, the main PCB cover in bottom, seal switch bolts etc to resume the scale.

6 Maintenance

External Cleaning

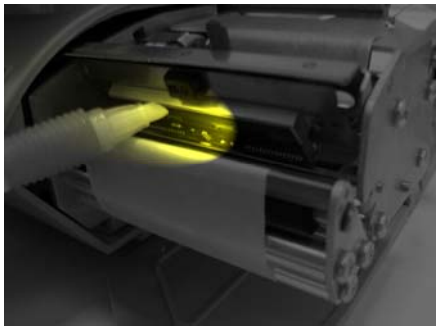
WARNING
DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

Turn the scale power off by placing the power switch to the OFF position (Press the "0" on the power switch). Disconnect power cord from outlet.

Use a soft clean cloth dampened with a mild detergent and water (or a mild cleaner) to wipe the exterior surfaces. Do not spray liquid directly on the unit. A mild spray cleaner can be used by spraying the cleaning cloth.

Cleaning Printhead

CAUTION
CLEAN PRINTHEAD USING METTLER TOLEDO LIQUID CLEANER OR EQUIVALENT OR THE METTLER TOLEDO CLEAN PEN.
DO NOT SCRAPE THE PRINTHEAD WITH ANY OBJECT TO REMOVE GLUE OR LABEL DEBRIS OR SEVERE DAMAGE MAY RESULT.



Turn the scale off by placing the power switch to the OFF position. Disconnect power cord from outlet.

Open the plastic door on the right side of the scale.

Slide out the printer.

Press the trigger to open the print head.

Clean the print head with a soft clean cloth soaked in isopropyl alcohol, METTLER TOLEDO liquid cleaner or equivalent, or the METTLER TOLEDO Cleaning Pen.

Push back the print head until it clicks.

Slide the printer in.

Close the plastic door.

Rezeroing

This scale is equipped with an automatic zeroing device, which compensates for small weight change. This device is not activated when a package tare is compensated. After cleaning the dirt from the platter with the scale on, the display can read :

- a negative value
- or "_ _ _ _ _" segments can be lit.

Solution :
Press the ZERO key

If the message appears again :
Turn the scale off and back on again with the main power switch.

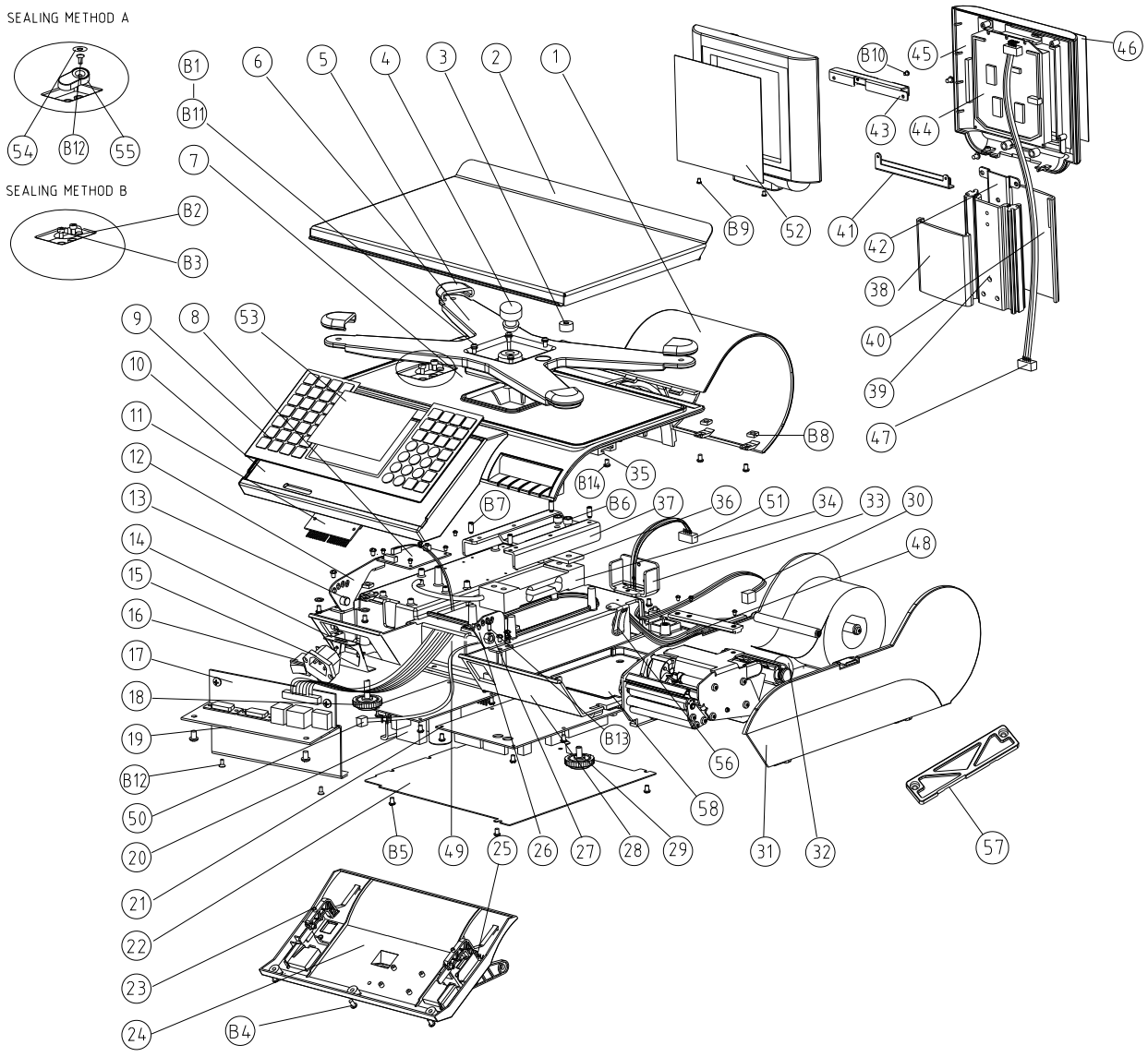
7 GEO Settings

The values for gravity adjustment are a series of two digit numbers in the range 0 to 31, as shown in the table below.

Geo. Value Table	Height above sea level in meters										
	0 325	325 650	650 975	975 1300	1300 1625	1625 1950	1950 2275	2275 2600	2600 2925	2925 3250	3250 3575
North or south latitude	Height above sea level in feet										
in degrees and minutes	0 1060	1060 2130	2130 3200	3200 4260	4260 5330	5330 6400	6400 7460	7460 8530	8530 9600	9600 10660	10660 11730
0° 0′ - 5° 46′	5	4	4	3	3	2	2	1	1	0	0
5° 46′ - 9° 52′	5	5	4	4	3	3	2	2	1	1	0
9° 52′ - 12° 44′	6	5	5	4	4	3	3	2	2	1	1
12° 44′ - 15° 6′	6	6	5	5	4	4	3	3	2	2	1
15° 6′ - 17° 10′	7	6	6	5	5	4	4	3	3	2	2
17° 10′ - 19° 2′	7	7	6	6	5	5	4	4	3	3	2
19° 2′ - 20° 45′	8	7	7	6	6	5	5	4	4	3	3
20° 45′ - 22° 22′	8	8	7	7	6	6	5	5	4	4	3
22° 22′ - 23° 54′	9	8	8	7	7	6	6	5	5	4	4
23° 54′ - 25° 21′	9	9	8	8	7	7	6	6	5	5	4
25° 21′ - 26° 45′	10	9	9	8	8	7	7	6	6	5	5
26° 45′ - 28° 6′	10	10	9	9	8	8	7	7	6	6	5
28° 6′ - 29° 25′	11	10	10	9	9	8	8	7	7	6	6
29° 25′ - 30° 41′	11	11	10	10	9	9	8	8	7	7	6
30° 41′ - 31° 56′	12	11	11	10	10	9	9	8	8	7	7
31° 56′ - 33° 9′	12	12	11	11	10	10	9	9	8	8	7
33° 9′ - 34° 21′	13	12	12	11	11	10	10	9	9	8	8
34° 21′ - 35° 31′	13	13	12	12	11	11	10	10	9	9	8
35° 31′ - 36° 41′	14	13	13	12	12	11	11	10	10	9	9
36° 41′ - 37° 50′	14	14	13	13	12	12	11	11	10	10	9
37° 50′ - 38° 58′	15	14	14	13	13	12	12	11	11	10	10
38° 58′ - 40° 5′	15	15	14	14	13	13	12	12	11	11	10
40° 5′ - 41° 12′	16	15	15	14	14	13	13	12	12	11	11
41° 12′ - 42° 19′	16	16	15	15	14	14	13	13	12	12	11
42° 19′ - 43° 26′	17	16	16	15	15	14	14	13	13	12	12
43° 26′ - 44° 32′	17	17	16	16	15	15	14	14	13	13	12
44° 32′ - 45° 38′	18	17	17	16	16	15	15	14	14	13	13
45° 38′ - 46° 45′	18	18	17	17	16	16	15	15	14	14	13
46° 45′ - 47° 51′	19	18	18	17	17	16	16	15	15	14	14
47° 51′ - 48° 58′	19	19	18	18	17	17	16	16	15	15	14
48° 58′ - 50° 6′	20	19	19	18	18	17	17	16	16	15	15
50° 6′ - 51° 13′	20	20	19	19	18	18	17	17	16	16	15
51° 13′ - 52° 22′	21	20	20	19	19	18	18	17	17	16	16
52° 22′ - 53° 31′	21	21	20	20	19	19	18	18	17	17	16
53° 31′ - 54° 41′	22	21	21	20	20	19	19	18	18	17	17
54° 41′ - 55° 52′	22	22	21	21	20	20	19	19	18	18	17
55° 52′ - 57° 4′	23	22	22	21	21	20	20	19	19	18	18
57° 4′ - 58° 17′	23	23	22	22	21	21	20	20	19	19	18
58° 17′ - 59° 32′	24	23	23	22	22	21	21	20	20	19	19
59° 32′ - 60° 49′	24	24	23	23	22	22	21	21	20	20	19
60° 49′ - 62° 9′	25	24	24	23	23	22	22	21	21	20	20
62° 9′ - 63° 30′	25	25	24	24	23	23	22	22	21	21	20
63° 30′ - 64° 55′	26	25	25	24	24	23	23	22	22	21	21
64° 55′ - 66° 24′	26	26	25	25	24	24	23	23	22	22	21
66° 24′ - 67° 57′	27	26	26	25	25	24	24	23	23	22	22
67° 57′ - 69° 35′	27	27	26	26	25	25	24	24	23	23	22
69° 35′ - 71° 21′	28	27	27	26	26	25	25	24	24	23	23
71° 21′ - 73° 16′	28	28	27	27	26	26	25	25	24	24	23
73° 16′ - 75° 24′	29	28	28	27	27	26	26	25	25	24	24
75° 24′ - 77° 52′	29	29	28	28	27	27	26	26	25	25	24
77° 52′ - 80° 56′	30	29	29	28	28	27	27	26	26	25	25
80° 56′ - 85° 45′	30	30	29	29	28	28	27	27	26	26	25
85° 45′ - 90° 0′	31	30	30	29	29	28	28	27	27	26	26

8 Replacement Parts

72188012 bPro-C2



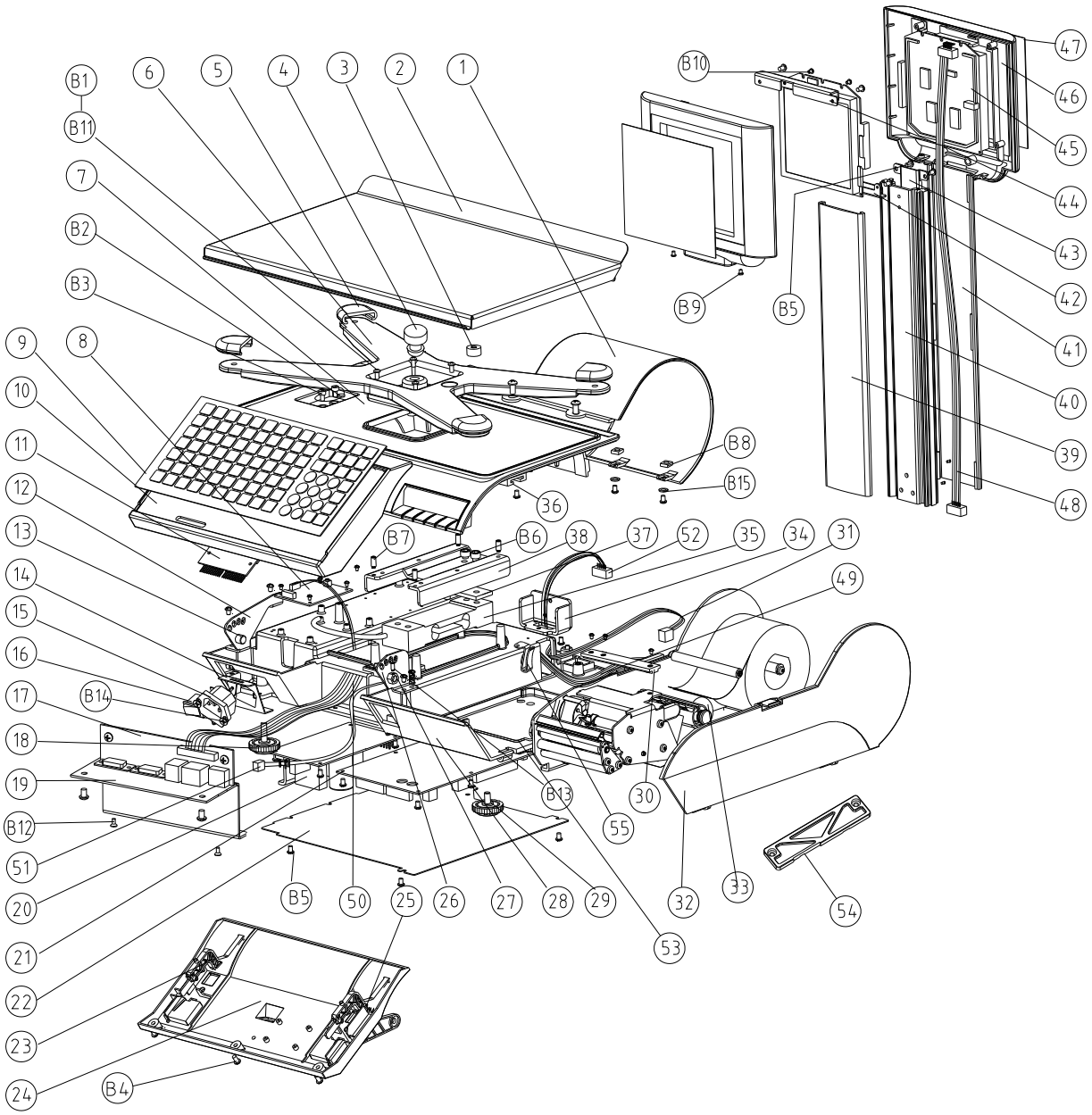
72188012 bPro-C2				
Item	P/N	Description		Qty
1	180952	上盖活动盖板	Label Roll Housing	1
2	183021	秤盘组件	Platter	1
3	102326	水泡	Leveling Bubble	1

4	124041	中心橡胶垫	Cap,Spider,,Center	1
5	154555	角垫	Cap,Spider,,Corner	4
6	180974	托 架	Spider	1
7	180943	上盖	Main Housing	1
8	174032	A/D 板	PCB Assembly,AD board	1
9(1)	72193829	键盘，透明硅胶按压层,bPro,C2	Keyboard,Touch pad,Silicon,bPro C2	1
9(2)	72209741	键盘，编程面板,bPro-C2,英文	Keyboard, Programming layer,bPro C2 ENG	1
9(3)	72193807	键盘，操作面板,bPro-C2,英文	Keyboard, Operation layer,bPro C2 ENG	1
9(4)	72193827	键盘，白色橡胶触点层,bPro,C2	Keyboard, Rubber button padding,bPro C2	1
9(5)	72193825	键盘，银浆电路层,bPro,C2	Keyboard, Membrane layer,bPro C2	1
10	72188155	键盘盖 C	Keyboard Housing ,compact,top cover	1
11	173476	键盘转接板	PCB Assembly,keyboard convert	1
12	182976	调节支撑板 A	Sheet Metal,Keyboard Swivel A	1
13	183450	支撑轴	Swivel Crutch shaft	2
14	180951	开关固定板	Sheet Metal,support ,Power Switch	1
15	72187455	电源线束	Harness,AC Power Socket	1
16	72187456	开关	Harness,AC power Switch	1
17	173307	接口板	PCB Assembly ,interface	1
18	167391	秤脚,秤体左侧长秤脚,bC/bPro	FOOT,Long,left	2
19	72186444	接口固定板	Sheet Metal,Support,interface	1
20	72186386	开关电源 24v,2.7A	Switching Power Supply,24v,2.7A	1
	72186387	开关电源 24v,4.2A	Switching Power Supply,24v,4.2A	1
21	169795	主板	PCB Assembly ,Main board,standard	1
	72186557	主板	PCB Assembly ,Main board,Premium	1
22	183358	基座盖板	Sheet Metal,base cover	1
23	183359	键盘调节杆	Swivel adjustment support	2
24	180948	键盘座	Keyboard Housing,Base	1
25	150652	弹簧	Spring,keyboard Swivel	2
26	182877	调节支撑板 B	Sheet Metal,keyboard swivel B	1
27	183452	固定轴	Swivel fixed Shaft	2
28	180973	基座	Aluminum Base Casting	1
29	72188140	秤脚,秤体右侧短秤脚	Foot,short,right	2
30	173596	直流线束	Harness,DC Power	1
31	180947	打印机侧门	Door	1
32	72191431	打印机组件	Printer Assembly,2″ ticket	1
	72191432	打印机组件	Printer Assembly,2″ Label	1
33	182872	立杆固定座	Sheet Metal,support,Tower to base	1
34	72184997	AMI-22 传感器	Loadcell Assembly,AMI-22 for 6/15kg	1
	72184996	AMI-40 传感器	Loadcell Assembly,AMI-40 for 15/30kg	1
	72186985	AMI-11 传感器	Loadcell Assembly,AMI-11 for 3/6kg	1
	72186878	AMI-40 传感器	Loadcell Assembly,AMI-40 for 30kg 6000e	1

	72186875	AMI-40 传感器	Loadcell Assembly,AMI-22 for 12kg 6000e	1
35	72186402	导轨座	Printer Rail	1
36	72185419	垫 块	Loadcell spacer	1
37	72185423	钣金托架	Spider support	1
38	72188157	短盖板 B	Plastic cover B,Front,Compact,bC/bPro-C2	1
39	72188192	立杆 C	Tower, Compact,bC/bPro-C2	1
40	72188156	短盖板 A	Plastic cover A,Rear,Compact,bC/bPro-C2	1
41	180946	压 板 B	Sheet Metal,support B,Display	1
42	180954	显示盖锁紧件	Sheet Metal,support, disp to Tower	1
43	180945	压 板 A	Sheet Metal,support A,display	1
44	155637	显示屏	Display Assembly,segment,CHN	2
	72189191	显示屏	Display Assembly,segment,EURO	2
	170120	显示屏	Display Assembly,segment,ENG	2
	72202239	显示屏	Display Assembly,240X240	2
45	180944	显示外壳	Display Housing	2
46	72189327	滤光片	Display lens,CHN	1
	183449	滤光片	Display lens,English	1
	72193760	滤光片	Display lens,Euro,bc	1
47	156439	立杆线束	Harness,Customer display,	1
48	173248	线束，打印一主板	Harness,Main pcb to printer board	1
49	72187458	线束，接口一主板	Harness,Main pcb to interface	1
50	182252	键盘线束	Harness,Main PCB to keyboard	1
51	171790	显示转接线束	Harness,Segment Disp. convert	1
	173345	显示转接线束	Harness,240x240 Disp. convert	1
52	72193070	显示盖板	Display Lens.Opaque,customer,bc/bpro-C2	1
53	72188193	显示滤光片	Display Lens.Compact,operator,bc/bpro-C2	1
54	122206	铅封纸	Sealing Sticker,EU,bC/bPro	1
55	72192054	铅封盖板	Sealing Cover,EU,bC/bPro	1
56	72224370	塑料线卡	Clip	1
57	72209420	小滑块	Slide space	1
58	72209419	导滑垫板	Slide base	1
B1	72204992	螺钉 M4X12，GB818-85	SCREW M4X12	9
B2	119054	铅封头	SEALING HEAD	1
B3	118549	铅封螺钉	SEALING SCREW	2
B4	72189609	螺钉 M4X8，GB818-85	SCREW M4X8	15
B5	72201470	带齿垫螺钉 M4X5	SCREW M4X5	21
B6	72201473	螺钉，M6X20,GB70-85	SCREW M6X20	4
B7	72192905	紧定螺钉，M5X16,GB79-85	SLOT SCREW	4
B8	72194324	螺母，M4	NUT M4	2
B9	72201474	自攻螺钉，M2.9X6.5,GB845	SCREW	6
B10	72201466	螺钉，M3X6,GB818	SCREW	18

B11	102661	弹簧垫圈	SPRING WASHERS	4
B12	72201469	螺钉，M4X14,GB819	SCREW	3
B13	142884	紧定螺钉，M3X8,GB79-85	SLOT SCREW	2
B14	143133	螺钉，M3X6,GB819	SCREW	2

72186380 bPro-T2



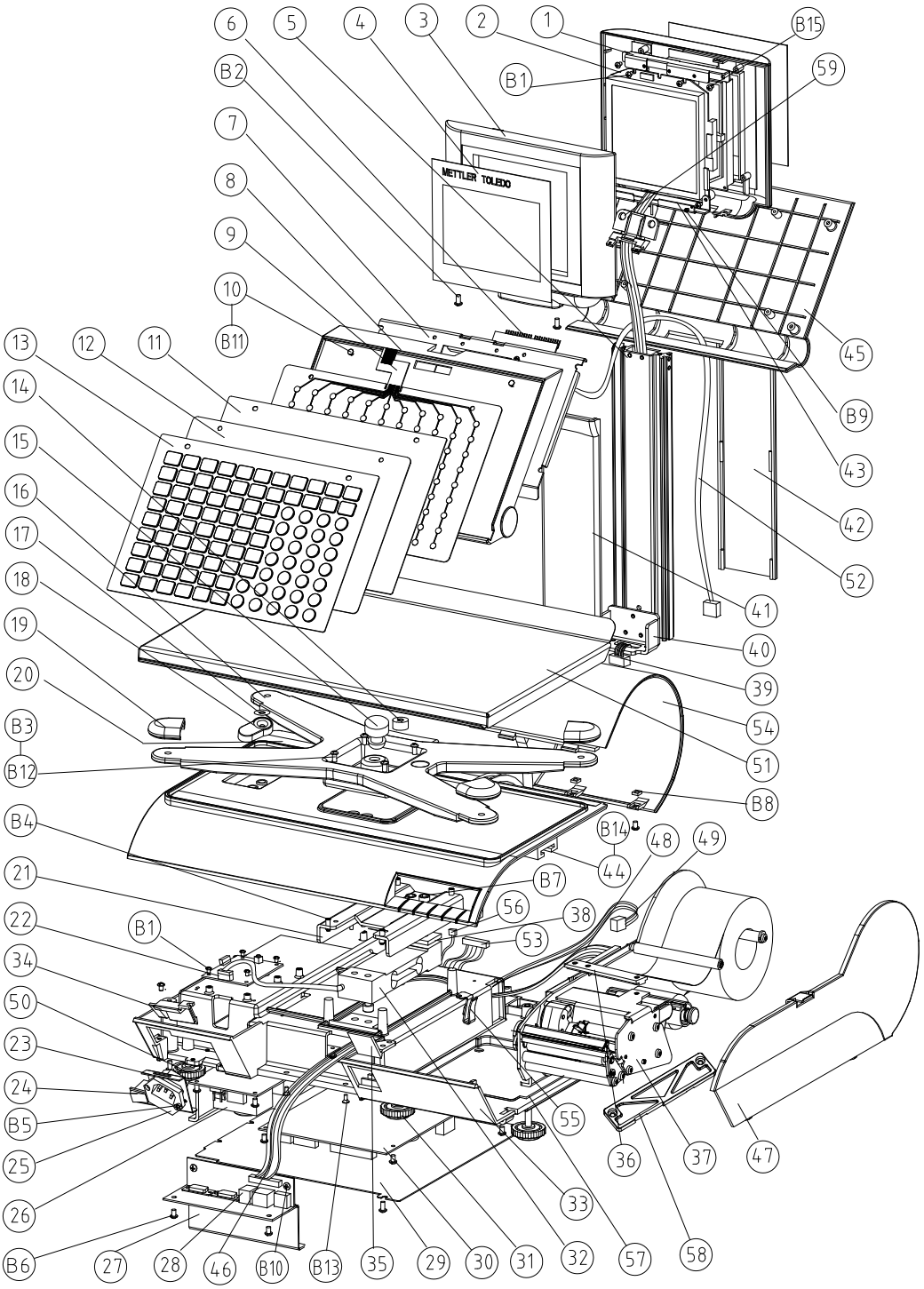
72186380 bPro-T2			
Item	P/N	Description	Qty
1	180952	上盖活动盖板 Label Roll Housing	1

2	183021	秤盘组件	Platter	1
3	102326	水泡	Leveling Bubble	1
4	124041	中心橡胶垫	Cap Spider center	1
5	154555	角垫	Cap Spider Corner	4
6	180974	托 架	Spider	1
7	180943	上盖	Main Housing	1
8	174032	A/D 板	PCB Assembly,AD board	1
9(1)	72193830	键盘 透明硅胶按压层 bPro-T2	Keyboard,Touch pad,Silicon,bPro T2	1
9(2)	72193808	键盘 操作面板 bPro-T2 英文	Keyboard, Operation layer,bPro T2 ENG	1
9(3)	72193815	键盘 编程面板 bPro-T2 英文	Keyboard, Programming layer,bPro T2 ENG	1
9(4)	72193830	键盘 白色橡胶触点层 bPro-T2	Keyboard, Rubber button padding,bPro T2	1
9(5)	72193826	键盘 银浆电路层 bPro-T2	Keyboard, Membrane layer,bPro T2	1
10	180949	键盘盖	Keyboard Housing ,tower,top cover	1
11	173476	键盘转接板	PCB Assembly,keyboard convert	1
12	182976	调节支撑板 A	Sheet Metal,Keyboard Swivel A	1
13	183450	支撑轴	Swivel Crutch shaft	2
14	180951	开关固定	Sheet Metal,support ,Power Switch	1
15	72187455	电源线束	Harness,AC Power Socket	1
16	72187456	开关	Harness,AC power Switch	1
17	173307	接口板	PCB Assembly ,interface	1
18	167391	秤脚	FOOT,Long,left	2
19	72186444	接口固定板	Sheet Metal,Support,interface	1
20	72186386	开关电源 24v,2.7A	Switching Power Supply,24v,2.7A	1
	72186387	开关电源 24v,4.2A	Switching Power Supply,24v,4.2A	1
21	169795	主板	PCB Assembly ,Main board,standard	1
	72186557	主板	PCB Assembly ,Main board,Premium	1
22	183358	基座盖板	Sheet Metal,base cover	1
23	183359	键盘调节杆	Swivel adjustment support	2
24	180948	键盘座	Keyboard Housing,Base	1
25	150652	弹簧	Spring,keyboard Swivel	2
26	182877	调节支撑板 B	Sheet Metal,keyboard swivel B	1
27	183452	固定轴	Swivel fixed Shaft	1
28	180973	基座	Aluminum Base Casting	1
29	72188140	秤 脚	Foot,short,right	2
30	180975	导轨	Printer Rail Slider	1
31	173596	直流线束	Harness,DC Power	1
32	180947	打印机侧门	Door	1
33	72186193	打印机组件	Printer Assembly,2″ Label	1
34	182872	立杆固定座	Sheet Metal,support,Tower to base	1
35	72184997	AMI-22 传感器	Loadcell Assembly,AMI-22 for 6/15kg	1
	72184996	AMI-40 传感器	Loadcell Assembly,AMI-40 for 15/30kg	1

	72186985	AMI-11 传感器	Loadcell Assembly,AMI-11 for 3/6kg	1
	72186878	AMI-40 传感器	Loadcell Assembly,AMI-40 for 30kg 6000e	1
	72186875	AMI-40 传感器	Loadcell Assembly,AMI-22 for 12kg 6000e	1
36	72186402	导轨座	Printer Rail	1
37	72185419	垫 块	Loadcell spacer	1
38	72185423	钣金托架	Spider support	1
39	182874	立杆盖板 B	Plastic cover B,Front,Tower,bC/bPro-T2	1
40	180976	立杆	Tower,bC/bPro-T2	1
41	180873	立杆盖板 A	Plastic cover A,Rear,Tower,bC/bPro-T2	1
42	180946	压 板 B	Sheet Metal,support B,Display	1
43	180954	显示盖锁紧件	Sheet Metal,support, disp to Tower	1
44	180945	压 板 A	Sheet Metal,support A,display	1
45	155637	显示屏	Display Assembly,segment,CHN	2
	72189191	显示屏	Display Assembly,segment,EURO	2
	170120	显示屏	Display Assembly,segment,ENG	2
	72202239	显示屏	Display Assembly,240X240	2
46	180944	显示外壳	Display Housing	2
47	72189327	滤光片	Display lens,CHN	2
	183449	滤光片	Display lens,English	2
	72193760	滤光片	Display lens,Euro,bc	2
48	156439	立杆线束	Harness,Customer display,	1
49	173248	线束，打印－主板	Harness,Main pcb to printer board	1
50	72187458	线束，接口－主板	Harness,Main pcb to interface	1
51	182252	键盘线束	Harness,Main PCB to keyboard	1
52	171790	显示转接线束	Harness,Segment Disp. convert	1
	173345	显示转接线束	Harness,240x240 Disp. convert	1
53	72209419	导滑垫板	Slide base	1
54	72209420	小滑块	Slide space	1
55	72224370	塑料线卡	Clip	1
B1	72204992	螺钉 M4X12，GB818-85	SCREW M4X12	9
B2	119054	铅封头	SEALING HEAD	1
B3	118549	铅封螺钉	SEALING SCREW	2
B4	72189609	螺钉 M4X8，GB818-85	SCREW M4X8	14
B5	72201470	螺钉 M4X6	SCREW M4X6	24
B6	102504	螺钉，M6X20,GB70-85	SCREW M6X20	4
B7	72204993	紧定螺钉，M5X16,GB79-85	SLOT SCREW	4
B8	72194324	方螺母，M4	NUT M4	2
B9	72201474	自攻螺钉，M2.9X10,GB845	SCREW	6
B10	72201466	螺钉，M3X6,GB818	SCREW	14
B11	102661	弹簧垫圈	SPRING WASHERS	4

B12	72201469	螺钉，M4X14,GB819	SCREW	6
B13	142884	紧定螺钉，M3X8,GB79-85	SLOT SCREW	4
B14	72201468	螺钉，M3X6,GB819	SCREW	2
B15	133022	齿垫 ∅4	WASHERS	2

72187321 bPro-U2



72187321 bPro-U2			
Item	P/N	Description	Qty
1	180945	压 板 A Sheet Metal,support A,display	1

2	155637	显示屏	Display Assembly,segment,CHN	2
	72189191	显示屏	Display Assembly,segment,EURO	2
	170120	显示屏	Display Assembly,segment,ENG	2
	72202239	显示屏	Display Assembly,240X240	2
3	180944	显示外壳	Display Housing	2
4	72189327	滤光片	Display lens,CHN	2
	183449	滤光片	Display lens,English	2
	72193760	滤光片	Display lens,Euro,bc	2
5	180977	立杆 B	Tower B bPro/bC-U2	1
6	173476	键盘转接板	PCB Assembly,keyboard convert	1
7	72183679	键盘支架	Sheet Metal,support,keyboard	1
8	72186085	上键盘盖	Keyboard Housing,Top Cover	1
9	72186578	银浆电路	Keyboard,Membrane layer	1
10	72186679	键盘挂钉	Keyboard, Pin	2
11	72186581	键盘，白色橡胶触点层,bPro-U2 Keyboard, Rubber button padding,bPro U2		1
12	72193809	键盘，操作面板 bPro-U2 英文	Keyboard, Operation layer,bPro U2 ENG	1
13	72186580	键盘，透明硅胶按压层	Keyboard,Touch pad,Silicon,bPro U2	1
14	102326	水泡	Leveling Bubble	1
15	124041	中心橡胶垫	Cap,Spider,Center	1
16	180974	托 架	Spider	1
17	122206	纸铅封	Sealing Sticker,EU	1
18	72192054	铅封盖板	Sealing Cover	1
19	154555	角垫	Cap,Spider,,Corner	4
20	180943	上盖	Main Housing Cover	1
21	72185423	钣金托架	Spider support	1
22	174032	A/D 板	PCB Assembly,AD board	1
23	180951	开关固定板	Sheet Metal,support ,Power Switch	1
24	72187456	线束，电源开关	Harness,AC power Switch	1
25	72187455	电源线束	Harness,AC Power Socket	
26	72186386	开关电源 24v	Switch Power Supply,24v,2.7A	1
	72186387	开关电源 24v	Switch Power Supply,24v,4.2A	1
27	72186444	接口固定板	Sheet Metal,Support,interface	1
28	173307	接口板	PCB Assembly ,interface	1
29	183358	基座盖板	Sheet Metal,base cover	1
30	169795	主板	PCB Assembly ,Main board,standard	1
	72186557	主板	PCB Assembly ,Main board,Premium	1
31	72188140	秤 脚	Foot,short,right	2
32	72184997	AMI-22 传感器	Loadcell Assembly,AMI-22	1
	72184996	AMI-40 传感器	Loadcell Assembly,AMI-40	1
	72186985	AMI-11 传感器	Loadcell Assembly,AMI-11	1
	72186878	AMI-40 传感器	Loadcell Assembly,AMI-40 30kg 6000e	1

	72186875	AMI-40 传感器	Loadcell Assembly,AMI-22 12kg 6000e	1
33	180973	基座	Aluminum Base Casting	1
34	72191369	基座小盖板 A	COVER A,Base	1
35	72191370	基座小盖板 B	COVER B,Base	1
36	180975	导轨	Printer Rail Slider	1
37	72186193	打印机组件	Printer Assembly,2″ Label	1
38	72185419	垫 块	Loadcell spacer	1
39	173251	立杆线束，点阵	Harness,240x240 Display	1
	72191008	线束，IIC(欧元段码)	Harness,segment Display	1
40	182872	立杆固定座	Sheet Metal,support,Towertobase	1
41	72186088	立杆盖板 D	Plastic Cover,Front,UpperKB	1
42	72186087	立杆盖板 C	Plastic Cover,Rear,UpperKB	1
43	72183678	显示支架	Sheet Metal,support,display	1
44	72186402	导轨座	Printer Rail	1
45	72186086	上键盘座	Keyboard Housing,Base	1
46	72187458	线束，接口－主板	Harness,Main pcb to interface	1
47	180947	打印机侧门	Door	1
48	173248	线束，打印－主板	Harness,Main pcb to printer	1
49	173596	直流线束	Harness,DC Power	1
50	167391	秤脚	FOOT,Long,left	2
51	183021	秤盘组件	Platter	1
52	182252	键盘线束	Harness,Main PCB to keyboard	1
53	171790	显示转接线束	Harness,Segment Disp. convert	1
	173345	显示转接线束	Harness,240x240 Disp. convert	1
54	180952	上盖活动盖板	Label Roll Housing	1
55	72224370			1
56	72187457	线束, 键盘转接	Keyboard convert	1
57	72209419	导滑垫板	Slide base	1
58	72209420	小滑块	Slide space	1
59	72224168	显示连接支架，bPro	display support metal	1
B1	72201466	螺钉，M3X6,GB818	SCREW	18
B2	72201474	自攻螺钉，M2.9X6.5,GB845	SCREW	6
B3	72204992	螺钉 M4X12，GB818-85	SCREW M4X12	9
B4	72204993	紧定螺钉，M5X16,GB79-85	SLOT SCREW	4
B5	72201468	螺钉，M3X10,GB819	SCREW	2
B6	72189609	螺钉 M4X8，GB818-85	SCREW M4X8	9
B7	72201473	螺钉，M6X20,GB70-85	SCREW M6X20	4
B8	72194324	螺母，M4	NUT M4	2
B9	72201464	螺钉 M2X6，GB67	SCREW M2X6	2
B10	72201470	带齿垫螺钉 M4X5	SCREW M4X5	21
B11	150684	开口挡圈 3.2	CIRCLIPS 3.2	2

B12	102661	弹簧垫圈	SPRING WASHERS	4
B13	72201469	螺钉，M4X14, GB819	SCREW	3

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